DOCUMENT RESUME

ED 061 425 VT 014 786

AUTHOR	Thomas, Hollie B.; And Others
TITLE	Evaluation of an Educational Program for the Rural Disadvantaged. Research Report.
INSTITUTION	Illinois Univ., Urbana. Div. of Agricultural Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Jul 70
GRANT	OEG-09-585041-0773(085)
NOTE	126p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Career Choice; *Career Education; *Disadvantaged Groups; Environmental Research; Family Attitudes; Family Environment; *Models; Parental Aspiration; Parent Attitudes; *Program Evaluation; Research Projects; *Rural Areas; Rural Family; Rural Youth; Socioeconomic Background; Student Attitudes
IDENTIFIERS	*Project REDY

ABSTRACT

The objective of this phase of the Rural Education Disadvantaged Youth Project (Project REDY) was to evaluate the model vocationally-oriented educational program that was developed in an earlier phase of the research. This educational program focused upon (1) youth and career choices, (2) family financial management, and (3) improvement of family income. Based upon pre- and posttest data for a control group and an experimental group and upon data gathered from standardized instruments, interview schedules, and school records, results included information pertaining to: (1) family residence, (2) financial assistance, (3) characteristics of adults, (4) situation and goals of children, (5) parental desires for their children, (6) the home environment, and (7) leisure time activities. One major conclusion of the study was that a local school teacher can conduct an effective family-centered vocationally-oriented education program which will produce significant changes in the attitudes and situations of severely disadvantaged rural family members. Related documents are available as ED 041 663, and VT 014 785 in this issue. (JS)

ED 061 425

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by

Hollie B. Thomas
Lloyd J. Phipps
David L. Williams

Research Report

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VT014786

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The research reported herein was performed as Project No. 5-0125 under the title "Development of Human Resources Through a Vocationally Oriented Educational Program for Disadvantaged Families in Depressed Rural Areas" pursuant to Contract No. OEG-09-585041-0773 (085) with the Office of Education, U. S. Department of Health, Education, and Welfare.

Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated to not, therefore, necessarily represent official Office of Education position or policy.

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EDUCATION & WELFARE
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PREFACE

This publication is one in a series of publications resulting from a comprehensive research project conducted by the Agricultural Education Division, University of Illinois at Urbana-Champaign. The research project, commonly referred to as Project REDY (Rural Education Disadvantaged Youth), included an in-depth study of the characteristics of disadvantaged families residing in depressed rural areas, and the development and evaluation of a vocationally oriented, family centered educational program that may be used by educators in helping the disadvantaged populace of their communities.

To facilitate dissemination of the findings of Project REDY, publications were prepared which focused on selected areas which were investigated. Publications resulting from this research project, including this research report, were:

1. An Overview of Project REDY, Interim Report No. 1.
2. Social Class Stratification of Families in an Economically Depressed Rural Area, Interim Report No. 2.
3. Degree to Which Families are Satisfied with Selected Aspects of Family Life in an Economically Depressed Rural Area, Interim Report No. 3.
4. Community Social Behavior of Families in an Economically Depressed Rural Area, Interim Report No. 4.
5. Leisure Time Activities of Families in an Economically Depressed Rural Area, Interim Report No. 5.
6. Morale of Families in an Economically Depressed Rural Area, Interim Report No. 6.
7. A Family Centered Vocationally Oriented Educational Program for the Rural Disadvantaged, Interim Report No. 7.
8. Development of Human Resources Through a Vocationally Oriented Educational Program for Disadvantaged Families in Depressed Rural Areas, Final Report.
9. Characteristics of Disadvantaged Families Residing in a Depressed Rural Area, A Research Report.
10. Socioeconomic Aspects of Family Life in a Depressed Rural Area, A Research Report.
11. Educational Program Development for the Rural Disadvantaged, A Research Report.
12. Evaluation of an Educational Program for the Rural Disadvantaged, A Research Report.
13. Education for the Rural Disadvantaged: Summary of Findings and Conclusions of an Experimental Study, A Research Report.

Lloyd J. Phipps
Project Director

ACKNOWLEDGMENTS

The Project REDY staff wishes to acknowledge the assistance of the many residents of rural areas who participated in the study. Without their interest and cooperation the project could not have been a success. Special recognition goes to the administrators of schools and other public agencies in the rural communities for their support, encouragement and cooperation during the project.

SPECIAL RECOGNITION IS GIVEN TO DR. GERALD R. FULLER WHO ASSISTED IN INITIATING AND PLANNING THE PROJECT AND WHO SERVED AS ASSOCIATE DIRECTOR OF PROJECT REDY FOR THREE YEARS.

A number of other individuals have been closely identified with the project. Among them are Don Brockett, Paul Brown, H. C. Hendren, Sam Jones, Steve Pollock, Keith Romack, Jack Shetler, Clifford Sichta and Robert Wheeler. These men served as consultants and local coordinators for the project. Sincere thanks are extended to Mrs. Julia D. Flewelling for her tireless efforts in providing typing and clerical assistance.

Many research units, offices and individual staff members of the University of Illinois have provided special services and advice essential to the success of the project. The Center on Instructional Research and Curriculum Evaluation (CIRCE) and the Office of Instructional Resources made easier many of the problems faced by the project staff through the expert advice and services they provided. The timely assistance from colleagues in the Department of Vocational and Technical Education was appreciated.

A host of people serving as assistants, clerical workers, keypunch operators or computer-programers have faithfully assisted in one or more phases of Project REDY. The contribution of the following individuals insured the success of the project:

John Adams
Ali Ammadi
David Berg
Bennie Byler
Linda Byler
Robert Cottingham
Neal Coyle
H. Eugene Craig
John Croft
Norman Ehresman
Arthur Eichelberger
Douglas Foss
Earl Gudeman
Carl Hart
William Johnson
Roger Landon
Jasper Lee
Martin McMillion
Douglas Patterson
Vicente Quiton
Sonny Tucker
John Roth
Dan Vogler
Norman Wetzel
David Whitson

TABLE OF CONTENTS

Page

Introduction . . . . VII - 2
Procedures and Methodology . . . . VII - 2
Description of the Sample . . . . VII - 7
  General Environmental Conditions . . . . VII - 7
  Characteristics of Children . . . . VII - 17
  Parental Wishes for Their Children . . . . VII - 19
  Occupations and Organizations of Parents . . . . VII - 24
  Situation and Goals of Children . . . . VII - 31
  Goals of the Farm Business Operation . . . . VII - 38
Results . . . . VII - 39
  Parental Desires for Their Children . . . . VII - 40
  Occupations and Organizations of Parents . . . . VII - 47
  Situations and Goals of Children Age Twelve and
    Over Living at Home . . . . VII - 52
  Farm Business Production Goals . . . . VII - 69
  The Home and Its Surroundings . . . . VII - 71
  Morale . . . . VII - 75
  Leisure Time . . . . VII - 76
  Community Social Behavior . . . . VII - 79
  Perceived Social Class of Families . . . . VII - 86
  Deprivation . . . . VII - 86
  School Data . . . . VII - 91
Summary and Conclusions . . . . VII - 92
  Summary . . . . VII - 92
  Selection of the Sample . . . . VII - 93
  Treatment . . . . VII - 93
  Data Collected . . . . VII - 93
  Statistical Design and Analysis . . . . VII - 93
  Results and Discussion . . . . VII - 94
  Description of the Research Sample . . . . VII - 94
  Educational Program Evaluation . . . . VII - 97
  Conclusions . . . . VII - 104
Selected References . . . . VII - 106

LIST OF TABLES

Table Page

VII-1. Frequency of Types of Family Residence by Treatment Group . . . . VII - 7

VII-2. Frequency of Setting of Family Residence by Treatment Group. . . . . VII - 8

VII-3. Frequency of Location of Residence by Treatment Group. . . . . VII - 8

VII-4. Frequency of the Conditions of Family Residence By Treatment Group . . . . VII - 9

VII-5. Frequency of the Ownership Status of Residence by Treatment Group. . . . . VII - 9

VII-6. Frequency of the Resale Value of Family Residence by Treatment Group . . . . VII - 9

VII-7. Frequency of Presence or Absence of Electricity in Homes by Treatment Group. . . . . VII - 10

VII-8. Frequency of Presence or Absence of An Indoor Bathroom in the Homes by Treatment Group . . . . VII - 10

VII-9. Frequency of Presence or Absence of a Telephone in the Family Residence by Treatment Group. . . . VII - 10

VII-10. Frequency of the Presence or Absence of Farm Business by Treatment Group . . . . VII - 11

VII-11. Frequency Where Farm Provides One-Half or More of the Family Income by Treatment Group. . . . . VII - 11

VII-12. Frequency of Different Sizes of Farms Operated by Families by Treatment Group. . . . . VII - 11

VII-13. Frequency of Presence or Absence of Livestock Enterprise on Farms by Treatment Group. . . . . . VII - 12

VII-14. Frequency of Presence or Absence of Fruit Enterprise on Farms by Treatment Group. . . . . . VII - 12

VII-15. Frequency of Presence or Absence of Vegetable Enterprise on Farm by Treatment Group . . . . . . VII - 12

VII-16. Frequency of the Presence or Absence of Crop Enterprises on Farms by Treatment Group . . . . . VII - 13

Table Page

VII-17. Frequency of Families Who Received Some Type of Financial Aid by Treatment Group . . . . . . VII - 13

VII-18. Sources From Which Families Received Financial Assistance and Frequency of Families Receiving Financial Assistance from Each Source by Treatment Group . . . . VII - 13

VII-19. Frequency of the Race of Families by Treatment Group. . . . . VII - 14

VII-20. Frequency of Place of Birth for Adults by Treatment Group . . . . VII - 15

VII-21. Frequency of Adults' Childhood Residence by Treatment Group . . . . VII - 15

VII-22. Frequencies of Previous Address of Adults by Treatment Group . . . . VII - 15

VII-23. Frequencies of Present Occupations of Adults by Treatment Group . . . . VII - 16

VII-24. Comparison of Means for Selected Variables Relating to Heads of Households and Families by Treatment Group . . . . VII - 17

VII-25. Frequency of Place of Birth for Children at Home by Treatment Group . . . . VII - 18

VII-26. Frequency of Present Situation of Children at Home by Treatment Group . . . . VII - 18

VII-27. Frequency of Present Address of Children Away from Home by Treatment Group . . . . VII - 18

VII-28. Frequency of Occupation of Children Away From Home by Treatment Group . . . . VII - 19

VII-29. Frequency of Children by Age and Treatment Group . . . . VII - 19

VII-30. Frequency of Amount of Income Parents Desired for Sons by Treatment Group . . . . VII - 19

VII-31. Frequency of Amount of Income Parents Desired for Daughters When Adults by Treatment Group . . VII - 20

Table Page

VII-32. Frequency of Place of Residence Parents Desired for Sons When Adults by Treatment Group. . . . . VII - 20

VII-33. Frequency of Place of Residence Parents Desired for Daughters When Adults by Treatment Group. . VII - 21

VII-34. Frequency of Parental Estimate of Annual Family Financial Support for Post-Secondary Education Per Child by Treatment Group. . . . . VII - 22

VII-35. Frequency of Parental Estimate of Level of Cost of One Year of Post-Secondary Education by Treatment Group . . . . VII - 22

VII-36. Frequency of Parental Estimate of Portion of Financial Support the Family Would Like to Provide for Each Child's Post-Secondary Education by Treatment Group . . . . VII - 23

VII-37. Frequency of Parental Estimate of Portion of Financial Support A Child Should Contribute to His Post-Secondary Education by Treatment Group VII - 23

VII-38. Frequency of Parental Estimate of Portion of Financial Support Thought to Be Available for Children's Post-Secondary Education from Outside Sources by Treatment Group . . . . VII - 24

VII-39. Frequency of Husbands' Marketable Skills by Treatment Group . . . . VII - 24

VII-40. Frequency of Wives' Major Marketable Skills by Treatment Group . . . . VII - 25

VII-41. Frequency of Occupational Training Husbands Desired for Job Held by Treatment Group. . . . . VII - 25

VII-42. Frequency of Occupational Training Wives Desired for Job Held by Treatment Group . . . . .VII - 25

VII-43. Frequency of Husbands' Satisfaction with Job Held by Treatment Group . . . . VII - 26

VII-44. Frequency of Wife's Satisfaction with Present Job Held by Treatment Group. . . . . VII - 26

VII-45. Frequency of Husbands Who Desired Different Jobs by Treatment Group . . . . VII - 26

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Table Page

VII-46. Frequency of Wives Who Desired Different Jobs by Treatment Group . . . . VII - 27

VII-47. Frequency of New Marketable Skill Husbands Desired by Treatment Group . . . . VII - 27

VII-48. Frequency of New Marketable Skill Wives Desired by Treatment Group. . . . . VII - 27

VII-49. Frequency of Groups or Organizations with Which Husbands Were Associated by Treatment Group . . VII - 28

VII-50. Frequency of Groups or Organizations with Which Wives Were Associated by Treatment Group. . . . VII - 28

VII-51. Frequency of Husbands Who Served on Group or Organization Committees by Treatment Group . . . VII - 29

VII-52. Frequency of Wives Who Served on Group or Organization Committees by Treatment Group. . . VII - 29

VII-53. Frequency of Husbands Who Held Offices in Groups or Organizations by Treatment Group. . . VII - 29

VII-54. Frequency of Wives Who Held Offices in Groups or Organizations by Treatment Group . . . . . . VII - 29

VII-55. Frequency of Husbands Interested in Joining an Organization by Treatment Group . . . . VII - 30

VII-56. Frequency of Wives Interested in Joining An Organization by Treatment Group . . . . VII - 30

VII-57. Frequency of Estimated Level of Annual Family Income Needed by Treatment Group . . . . VII - 31

VII-58. Frequency of Type of Work Experience of Sons by Treatment Group . . . . VII - 31

VII-59. Frequency of Type of Work Experience of Daughters by Treatment Group . . . . VII - 32

VII-60. Frequency of Type of Part-Time Work Sons Desired by Treatment Group . . . . VII - 32

VII-61. Frequency of Type of Part-Time Work Daughters Desired by Treatment Group . . . . VII - 32

Table Page

VII-62. Frequency of Type of Population Area in Which Sons Would Like to Live by Treatment Group . . . . VII - 33

VII-63. Frequency of Type of Population Area in Which Daughters Would Like to Live by Treatment Group . . . . .VII - 33

VII-64. Frequency of Level of Income Sons Desired by Treatment Group . . . . VII - 34

VII-65. Frequency of Level of Income Daughters Desired by Treatment Group. . . . . VII - 34

VII-66. Frequency of Type of Work Sons Desired for Career by Treatment Group. . . . . . . .VII - 34

VII-67. Frequency of Type of Work Daughters Desired for Career by Treatment Group. . . VII - 35

VII-68. Frequency of the Level of Son's Financial Contribution to His Education by Treatment Group .VII - 35

VII-69. Frequency of the Level of Daughter's Financial Contribution to Her Education by Treatment Group . . . . VII - 35

VII-70. Frequency of Level of Son's Savings for Post-Secondary Education by Treatment Group VII - 36

VII-71. Frequency of Level of Daughter's Savings for Post-Secondary Education by Treatment Group . . . . VII - 36

VII-72. Frequency of Portion of Post-Secondary Educational Expenses the Sons Expected Their Families to Provide by Treatment Group .VII - 37

VII-73. Frequency of Portion of Post-Secondary Educational Expenses Daughters Expected Their Families to Provide by Treatment Group . . . . VII - 37

VII-74. Frequency of the Orientation of the Strongest Desire of Sons by Treatment Group . . . . VII - 37

Table Page

VII-75. Frequency of the Orientation of the Strongest Desire of Daughters by Treatment Group . . . . VII - 38

VII-76. Frequency of Level of Corn Yield Goals by Treatment Group. . . . . VII - 39

VII-77. Frequency of Level of Soybean Yield Goals By Treatment Group . . . . .VII - 39

VII-78. Frequency of Level of Goals for Pigs Weaned Per Litter by Treatment Group. . . . VII - 39

VII-79. Frequency of Parental Desires Regarding Occupation of Oldest Child Living at Home by Treatment Group. . . . . .VII - 40

VII-80. Frequency of Parental Desires Regarding Occupation for Second from Oldest Child Living at Home by Treatment Group. . . . . .VII - 40

VII-81. Frequency of Parental Desires Regarding Occupation for Third from the Oldest Child Living at Home by Treatment Group. . .VII - 41

VII-82. Frequency of Parental Desires Regarding Occupation for Fourth from the Oldest Child Living at Home by Treatment Group. . .VII - 41

VII-83. Frequency of Parental Desires Regarding Occupation for Fifth from the Oldest Child Living at Home by Treatment Group. . .VII - 41

VII-84. Frequency of Parental Desires Regrading Occupation for Sixth from the Oldest Child Living at Home by Treatment Group. . .VII - 41

VII-85. Frequency of Parental Desires Regarding Level of Education for Their Oldest Child Living at Home by Treatment Group. . .VII - 42

VII-86. Frequency of Parental Desires Regarding the Level of Education for the Second from the Oldest Child Living at Home by Treatment Group. . . . . VII - 42

VII-87. Frequency of Parental Desires Regarding the Level of Education for the Third from the Oldest Child Living at Home by Treatment Group . . . . VII - 43

Table Page

VII-88. Frequency of Parental Desires Regarding the Level of Education for the Fourth from the Oldest Child Living at Home by Treatment Group . . . . VII - 43

VII-89. Frequency of Parental Desires Regarding Annual Income for Sons to Make as Adults by Treatment Group . . . . VII - 43

VII-90. Frequency of Parental Desires Regarding Annual Income for Daughters to Make as Adults by Treatment Group . . . . VII - 44

VII-91. Frequency of Parental Desires Regarding Location of Residence of Children as Adults by Treatment Group . . . . VII - 44

VII-92. Frequency of Parental Desires Regarding the Rural or Urban Location of the Residence of their Children as Adults by Treatment Group . . . . VII - 45

VII-93. Frequency of Parental Responses Regarding Cost of One Year of Post-Secondary School Training by Treatment Group . . . . VII - 45

VII-94. Frequency of Parental Responses Regarding Percentage of Financial Support the Family Could Provide for the Children's Post-Secondary Education by Treatment Group . . . VII - 46

VII-95. Frequency of Parental Responses Regarding Percentage of Financial Support the Child Should Provide for His Post-Secondary Education by Treatment Group . . . . VII - 46

VII-96. Frequency of Parental Responses Regarding Percentage of Financial Support Expected from Scholarships Should Their Children Desire Post-Secondary Education by Treatment Group . . . . VII - 47

VII-97. Frequency of Parental Responses Regarding Percentage of Financial Support Expected from Loans Should Their Children Desire Post-Secondary Education by Treatment Group VII - 47

Table Page

VII-98. Frequency of Parental Responses Regarding Percentage of Financial Support Expected from Other Sources Should Their Children Desire Post-Secondary Education by Treatment Group . . . . VII - 47

VII-99. Frequency of the Type of Occupation in Which the Husbands Were Employed by Treatment Group . . . . VII - 48

VII-100. Frequency of the Type of Occupation in Which the Wives Were Employed by Treatment Group VII - 48

VII-101. Frequency of New Job Skills Husbands Learned During the Year Prior to the Posttest by Treatment Group . . . . VII - 49

VII-102. Frequency of the New Job Skills Wives Learned During the Year Prior to the Posttest by Treatment Group . . . . VII - 49

VII-103. Frequency of Other Kinds of Jobs Husbands Desired by Treatment Group . . . . VII - 49

VII-104. Frequency of Other Kinds of Jobs the Wives Desired by Treatment Group . . . . VII - 50

VII-105. Frequency of Husbands' Participation in Civic, Fraternal and Political Organizations by Treatment Group . . . . VII - 50

VII-106. Frequency of Wives' Participation in Civic, Fraternal and Political Organizations by Treatment Group . . . . VII - 51

VII-107. Frequency of Husbands' Participation in Job Related Organizations by Treatment Group . . . . VII - 51

VII-108. Frequency of Wives' Participation in Job Related Organizations by Treatment Group . . VII - 51

VII-109. Frequency of Sons and Daughters Age Twelve and Over Living at Home by Treatment Group . VII - 52

VII-110. Frequency of the Various Educational Situations of Children Twelve Years of Age or Older Living at Home by Treatment Group. . . VII - 52

Table Page

VII-111. Frequency of Children's Employment Situation During the Year Prior to the Posttest by Treatment Group . . . . VII - 53

VII-112. Frequency of Children Twelve Years of Age or Older and Living at Home Who Were Employed in Various Fields of Employment by Treatment Group . . . . VII - 53

VII-113. Frequency of Children Twleve Years of Age or Older Living at Home Who Desired Various Occupational Career Fields by Treatment Group . . VII - 54

VII-114. Frequency of the Type of Education Children Twelve Years of Age or Older and Living at Home Thought Necessary for Job Desired for Lifetime Occupation by Treatment Group . . . . VII - 54

VII-115. Frequency of the Estimated Cost of One Year of Post-Secondary Education by Children Twelve Years of Age or Older and Living at Home by Treatment Group . . . . VII - 55

VII-116. Frequency of the Location Children Twelve Years of Age or Older and Living at Home Desired for Lifetime Work by Treatment Group . . . . VII - 55

VII-117. Frequency of the Responses to What Children Twelve Years of Age or Older and Living at Home Wanted or Desired More than Anything Else by Treatment Group . . . . VII - 56

VII-118. Frequency of the Responses to What Children Twelve Years of Age or Over and Living at Home Wanted Their Situation to be Five Years from Time of Posttest by Treatment Group . . . . VII - 56

VII-119. Frequency of the Participation of Children Twelve Years of Age or Over and Living at Home in School and Community Functions During the Year Preceding the Posttest by Treatment Group. . VII - 57

VII-120. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Their Parents a Source of Financial Support for Their Post-Secondary Education by Treatment Group . . . . . . VII - 57

Table | Page

VII-121. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Self-Employment as a Source of Financial Support for Post-Secondary Education by Treatment Group. VII - 58

VII-122. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Scholarships as a Source of Financial Support for Post-Secondary Education by Treatment Group. . . . . VII - 58

VII-123. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Loans as a Source of Financial Support for Post-Secondary Education by Treatment Group. . . . . .VII - 59

VII-124. Frequency of Children Twelve Years of Age and Older Living at Home Who Knew Where They Would Get Financial Support for Post-Secondary Education by Treatment Group. . . . . VII - 59

VII-125. Frequency of the Level of Income Desired by Children Twelve Years of Age or Older Living at Home by Treatment Group. . . . . .VII - 59

VII-126. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Expand or Improve Farming Activities to Increase Family Income by Treatment Group. . . . . VII - 60

VII-127. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Get Additional Occupational Training and/or Receive a Job Promotion to Increase Family Income by Treatment Group . . . . VII - 61

VII-128. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Have More Family Members Get a Job to Increase Family Income by Treatment Group . . . . VII - 62

VII-129. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Have More Family Members Get a Job to Increase Family Income by Treatment Group . . . . VII - 62

VII-130. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Have One or More Family Members Get a Second Job to Increase Family Income by Treatment Group. . . VII - 62

Table Page

VII-131. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Get More Money from Pensions or Welfare Sources to Increase Family Income by Treatment Group· · VII - 63

VII-132. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Start or Expand Production of Home Raised Products to Adjust Family Expenditures by Treatment Group . . . . VII - 64

VII-133. Frequency of Plans or Changes Families Made During the Year Piror to the Posttest to Develop a Shopping List and Shop Around for Good Buys to Adjust Family Expenditures by Treatment Group· . . . . VII - 64

VII-134. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Keep Records of Expenditures to Adjust Family Expenditures by Treatment Group . . . . VII - 65

VII-135. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Eliminate Certain Items of Expense to Adjust Family Expenditures by Treatment Group. . . . . VII - 65

VII-136. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest in Budgeting Amounts Spent for Certain Items to Adjust Family Expenditures by Treatment Group · VII - 65

VII-137. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Do Without Some Items to Adjust Family Expenditures by Treatment Group . . . . VII - 65

VII-138. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Business Purposes by Treatment Group . . . . . .VII - 66

VII-139. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Family Living by Treatment Group. . . . . VII - 66

VII-140. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Educational Expenses by Treatment Group . . . . VII - 67

Table Page

VII-141. Frequency of Families Who Received Service During the Year Prior to the Posttest from The University Extension Service by Treatment Group . . . . VII - 68

VII-142. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Local School by Treatment Group . . . . VII - 68

VII-143. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Soil Conservation Service by Treatment Group . . . . VII - 68

VII-144. Frequency of Families Who Received Service During the Year Prior to the Posttest from the County Health Service by Treatment Group . . VII - 68

VII-145. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Office of Economic Opportunity by Treatment Group . . . . VII - 69

VII-146. Frequencies of Families Who Received Service During the Year Prior to the Posttest from the Employment Service by Treatment Group . . . . . VII - 69

VII-147. Frequency of Production Goal Levels for Per Acre Corn Yields Established by Farm Business Operators by Treatment Group . . . . VII - 70

VII-148. Frequency of Production Goal Levels for Per Acre Soybean Yields Established by Farm Business Operators by Treatment Group . . . . VII - 70

VII-149. Frequency of Production Goal Levels for Number of Pigs Weaned Per Litter Per Year Established by Farm Business Operators by Treatment Group . . . VII - 71

VII-150. Frequency of Production Goal Levels for Number of Calves Weaned Per Cow Per Year Established by Farm Business Operators by Treatment Group . VII - 71

VII-151. Frequency of Production Goal Levels for Lambs Weaned Per Ewe Per Year Established by Farm Business Operators by Treatment Group . . . . . VII - 71

Table Page

VII-152. Frequency of Changes Made or Planned to Improve the Living Environment by Renting or Buying a Better or Larger House During the Year Prior to the Posttest by Treatment Group. . . . . VII - 72

VII-153. Frequency of Changes Made or Planned to Improve the Living Environment by Repairing or Remodeling the House During the Year Prior to the Posttest by Treatment Group . . . . VII - 72

VII-154. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining More and Better Furniture During the Year Prior to the Posttest by Treatment Group . . . . VII - 73

VII-155. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining a Better Water Supply During the Year Prior to the Posttest by Treatment Group. . . . . VII - 73

VII-156. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining Electricity for the Home During the Year Prior to the Posttest by Treatment Group. . . . . VII - 74

VII-157. Frequency of Changes Made or Planned to Improve The Living Environment by Obtaining a Telephone During the Year Prior to the Posttest by Treatment Group . . . . VII - 74

VII-158. Frequency of Changes Made or Planned to Improve the Living Environment by Improving the Condition of the Yard and Surroundings during the Year Prior to the Posttest by Treatment Group. . . . VII - 75

VII-159. Analysis of Covariance Summary Table for MSO Total Morale Score. . . . . VII - 76

VII-160. Analysis of Covariance Summary Table for MSO General Adjustment Scores. . . . . VII - 76

VII-161. Analysis of Covariance Summary Table for Leisure Time Participation Scale of Your Leisure Time Activities . . . . VII - 77

VII-162. Adjusted Community Leisure Time Participation Means for the Replications of Experimental and Control Groups with Significant Pairs of Means Indicated for the .05 Level. . . . . VII - 77

Table Page

VII-163. Analysis of Covariance Summary Table for the Leisure Time Enjoyment Scale of Your Leisure Time . . . . VII - 78

VII-164. Adjusted Community Leisure Time Enjoyment Means for the Replications of Experimental and Control Groups with Significant Pairs of Means Indicated . . . . VII - 78

VII-165. Analysis of Covariance Summary for the Community Spirit Scale of the Community Solidarity Index Schedule . . . . VII - 79

VII-166. Analysis of Covariance Summary for the Interpersonal Relations Scale of the Community Solidarity Index Schedule. . . . . VII - 80

VII-167. Analysis of Covariance Summary for the Family Responsibility Toward Community Scale of the Community Solidarity Index Schedule . . . . . VII - 80

VII-168. Analysis of Covariance Summary for the Community Behavior Pertaining to Schools Scale of the Community Solidarity Index Schedule . . . . . VII - 81

VII-169. Adjusted Means for Community Solidarity Index Schedule for the Replications of Experimental and Control Groups with Significant Pairs of Means for the .05 level . . . . VII - 81

VII-170. Analysis of Covariance Summary for the Community Behavior Pertaining to Churches Scale of the Community Solidarity Index Schedule . . . . . VII - 82

VII-171. Analysis of Covariance Summary for the Economic Behavior Scale of the Community Solidarity Index Schedule . . . . VII - 82

VII-172. Analysis of Covariance Summary Table for the Community Behavior Pertaining to Local Government Scale of the Community Solidarity Index Schedule . . . . VII - 83

VII-173. Adjusted Means for Community Behavior Pertaining to Local Government as Measured by the Community Solidarity Index Schedule with Significant Pairs of Means Indicated for the .05 level . . VII - 84

Table Page

VII-174. Analysis of Covariance Summary for the Community Tension Scale of the Community Solidarity Index Schedule . . . . VII - 84

VII-175. Analysis of Covariance Summary of the Total Score of the Community Solidarity Index Schedule . . . . VII - 85

VII-176. Adjusted Treatment Means for Community Solidarity Index Schedule Scales . . . . . . VII - 85

VII-177. Analysis of Covariance Summary Table for the Social Class Index Score . . . . VII - 86

VII-178. Analysis of Covariance Summaries for Deprivation Variables Measured by the Wants and Satisfaction Scale . . . . VII - 87

VII-179. Adjusted Treatment Means for Wants and Satisfaction Deprivation Scale . . . . VII - 90

VII-180. Analysis of Covariance Summaries for School Data for Children Twelve Years of Age or Older. VII - 91

VII-181. Adjusted Means for School Data for Children Twelve Years of Age or Older by Treatment Group . . . . VII - 92

EVALUATION OF AN EDUCATIONAL PROGRAM FOR THE RURAL DISADVANTAGED

INTRODUCTION

The following reports the results of a project designed to generate in rural secondary school districts an effective vocationally oriented, family centered educational program for the severely disadvantaged. The study, referred to as Project REDY, proposed to bring about greater utilization of the present and potential capabilities of rural youth and adults who were economically and socially handicapped. Based on a comprehensive study of severely disadvantaged families that resided in depressed rural areas of Illinois, a "model" vocationally oriented educational program was specifically designed for members of disadvantaged rural families. The "model" educational program was developed and tried out in a selected rural school in southern Illinois.

The objective of Phase IV of Project REDY, from which the following results emerged, was to evaluate the "model" vocationally oriented educational program developed in an earlier phase of the research. The educational program focused upon (1) youth and career choices, (2) family financial management, and (3) improvement of family income. The ultimate objective of the project was that some disadvantaged rural youth would utilize vocational education opportunities to prepare themselves for gainful employment outside their community, while others would utilize their developing competencies to improve the economic and social situation in their rural community.

PROCEDURES AND METHODOLOGY

The procedures used to select the subjects, collect the data, conduct the educational program, the formal character of the design, and the nature of the analysis are included in this section.

Research Population

As a preliminary step, economically depressed communities were identified by utilizing census data. Ten communities were selected to participate in the study from those identified. Five communities were randomly assigned to each of the treatment groups. Administrators in the schools in the selected community were contacted to determine if school authorities were willing to cooperate in the study and to determine the availability and willingness of the teacher of agricultural occupations to serve as the local coordinator of the educational program in the experimental schools. The officials representing the five schools randomly assigned to participate in the educational program agreed to participate in the study.

Selection of the sample. The population included all economically and socially disadvantaged rural families in the communities identified as being economically depressed, who had an annual income of less than $3000 or equivalent amount for larger families who had children who were of high school age or younger. Families were also included who were considered to be disadvantaged by one or more community welfare agencies in the community.

The teachers of agriculture as coordinators of the experimental programs, and Project REDY staff members in the case of the control communities, identified the families who fit the established criteria. All families who could be identified by utilizing the available community institutions and community leaders were randomly ordered. The families thus identified were contacted in order of random assignment to determine their willingness and ability to cooperate. Families in the experimental groups were asked if they were willing to participate in the educational program while families in the control group were asked to participate in an educational survey.. The final sample included ten or more families from each of ten communities who were willing to cooperate.

Instrumentation

To evaluate the REDY Education Program, it was necessary to collect both pretest and posttest data from the experimental group and the control group. The standardized instruments used were the Sims SCI Occupational Rating Scale (6), Minnesota Survey of Opinion (Short Form)(5), Wants and Satisfaction Scale (5), Your Leisure Time Activities (5), and the Community Solidarity Index Schedule (3).

In addition to the standardized instruments, interview schedules were employed to gather data related to (1) parental desires for their children, (2) occupations and organizations of parents, (3) situations and goals of children age twelve and over living at home, (4) situation and goals of the family, (5) the farm business, and (6) the home and its surroundings.

School data were also collected and utilized in evaluating the educational program. Types of school data collected for each child over twelve years of age included (1) year in school, (2) non-vocational grade point average, (3) vocational and practical arts grade point average, (4) overall grade point average, (5) number of days absent from school, and (6) number of days tardy to school.

A Family Data Record form was used as a pretest measure to gather data related to the family and its members. Assessments were made of the residence, family income, ancestry of the family, and general characteristics of the family and individual members of each family. These data were also used by the educational coordinators to personalize the instruction for families included in the experimental group.

Treatment

The treatment consisted of the vocationally oriented educational program developed as a part of Project REDY. The educational program was conducted by the five teachers of agriculture in the five communities involved in the experimental treatment group. The families in the five other communities used as the control received no treatment other than the pretest.

The model vocationally oriented program was designed to:

1. Obtain the attention and interest of disadvantaged rural youth by involving them and their families in organizing and planning meetings to discuss their concerns relating to family resource development. A teacher with the competencies needed was employed in each experimental community to involve families in planning and conducting meetings. These family groups met approximately once each month with all family members over twelve years of age invited to attend.

2. Provide educational assistance at the family group meetings and during instructional home visits. The content of this instruction was focused upon family resource development. The teacher employed to organize the family group meetings provided the instruction with the help of others. The family group meetings continued throughout the treatment period which lasted approximately 12 months. The instruction was designed to:

    a. Motivate and assist families, including the youth involved, in the task of analyzing critically the socioeconomic, psychological, and other dimensions of their situation.

    b. Encourage the defining of family socioeconomic and vocational goals for individual family members, especially the youth.

    c. Identify alternative actions possible for promoting achievement of family and individual goals.

    d. Guide and encourage the selection of alternative(s) to be tried.

    e. Plan action programs including vocational education to realize alternative(s) selected.

    f. Encourage the completion of the action programs planned and the evaluation of the results.

3. Help the communities involved to mobilize for providing members of disadvantaged rural families with opportunities to obtain the initial vocational competencies needed for gainful employment by:

    a. Involving local public school teachers and administrators.

    b. Involving lay citizens.

    c. Assisting in identifying and organizing local vocational education programs that should be included in the local secondary school.

    d. Involving secondary area vocational and technical education institutions and community colleges in providing appropriate instruction not available in the local community.

    e. Assisting in identifying and organizing educational and economic assistance programs that are or may be made available to families in the communities.

The Experimental Design

The design chosen was a pretest-posttest control group design. Campbell and Stanley (1) illustrated this design as follows:

$$\begin{array}{llll} R & O_1 & X & O_2 \\ R & O_1 & & O_2 \end{array}$$

Here O represents the process of measurement or observation, family's attitude or situation, X refers to the experimental treatment, the model educational program, and R indicates random assignment.

Expanding this design to include the five replications, the five educational communities matched with five control communities on an *a priori* decision based on community census data, the design for Phase IV was as follows:

Selection Process	Communities	Pretest	Treatment	Posttest
Random	1	0	X	0
	1a	0		0
Random	2	0	X	0
	2a	0		0
Random	3	0	X	0
	3a	0		0
Random	4	0	X	0
	4a	0		0
Random	5	0	X	0
	5a	0		0

Statistical Analysis

Appropriate statistical analyses depending upon the type of data were employed to (1) compare the pretest treatment group data in order to describe the samples and to ascertain whether or not pretest differences existed, and (2) to test the hypothesis that no significant difference existed between the treatment groups at the time of the posttest.

The chi square statistic was used both to determine whether or not there were differences among the experimental and control groups with regard to various environmental and sociological variables at the outset of the experimental study, and to compare the experimental and control groups to determine the extent to which the treatment was a function of the various variables on the posttest.

Computation of the chi square values followed the formula:

$$\chi^2 = \Sigma \frac{(O - E)^2}{E}$$

The O represents the observed frequencies and E represents the expected frequencies (4). Expected values were computed using the formula:

$$Er,c = \frac{\Sigma r \; \Sigma c}{N}$$

where:

r = row
c = column
Er,c = total number of observations
Σ r = observed frequency of row r
Σ c = observed frequency of column c

Analysis of covariance (7) was employed to analyze data obtained from the administration of the standardized instruments. The pretest score on each standardized instrument was used as the covariate on the corresponding posttest score, the variate.

The two-way fixed factor analysis of variance model was employed. This model can be presented as follows:

Mean Squares	Type of Factor	Source of Variance	Expected Mean Square
MSa	Fixed	Between treatment groups	$\sigma^2_\varepsilon + nq\sigma^2_\alpha$
MSb	Fixed	Among community pairs	$\sigma^2_\varepsilon + nq\sigma^2_\beta$
MSab		Interaction of community with treatment	$\sigma^2_\varepsilon + n\sigma^2_{\alpha\beta}$
MS error		Among families within each of ten communities	σ^2_ε

Thus the appropriate denominator for the F ratio for both main effects and the interaction was the within cell error. F ratios were calculated for the main effects and the interactions.

Kewman-Keuls tests (7) were run to test the significance between community means when significant F ratios were obtained for the interaction effect.

DESCRIPTION OF THE SAMPLE

In order to establish the degree of similarity between the experimental and control group families and individuals, data collected as a pretest measure were compared. The Family Data Record and various interview schedules were used to collect these data.

Analysis of variance and chi square statistics were employed to analyze the data. Where chi square was employed, the replications of treatment groups were collapsed to increase the expected frequencies in the response classifications. Yates Correction (2) was employed for chi square analysis with one degree of freedom.

General Environmental Conditions

General data pertaining to environmental conditions of the treatment families were collected. These data were applicable to the entire family. The environmental dimensions investigated depict various aspects of the physical life of the treatment group families.

Family residence. The treatment group classification was not a function of any of the variables related to type, setting, location, condition, or ownership of the family residence, indicating that the experimental and control groups were similar in these aspects.

Table VII-1 presents the data regarding types of family dwelling. The data show that 98.08 percent of the experimental group and 98.21 percent of the control group lived in houses. With only one exception, in the control group, all families in both groups were living in a single occupant residence.

Table VII-1. Frequency of Types of Family Residence by Treatment Group

Group	Type of Residence House	Mobile Home	Other	Chi Square
Experimental	51	1	0	2.001
Control	55	0	1	

The data in Table VII-2 indicate that the setting of the family residence of the two groups was similar. Most of the families, 78.71 percent of the experimental group and 69.82 percent of the control group, lived on farms. Less than one percent of the family residences in each group were located in a village.

Table VII-2. Frequency of Setting of Family Residence by Treatment Group

	Setting of Residence			
Group	Farm	Rural Non-Farm	Village	Chi Square
Experimental	41	7	4	1.74
Control	39	13	4	

Table VII-3 presents the data regarding the location of the family residence in reference to public roads. Of the families in the experimental group, 71.15 percent lived along county roads compared to 80.39 percent in the control group. Approximately one percent of the family residences of each group were located near a state highway.

Table VII-3. Frequency of the Location of Residence by Treatment Group

	Location of Residence				
Group	State Highway	County Road	Town Street	No Response	Chi Square
Experimental	6	37	9	0	6.73
Control	5	45	3	3	

Table VII-4 presents the data regarding the conditions of the family residences. In the experimental group, 34.61 percent of the families lived in residences that were classified as "fair" and 36.35 percent lived in residences classified as "poor." In the control group, 48.21 percent of the families lived in "fair" housing while 33.92 percent lived in residences classified as "poor." Less than one-third of the families in each of the two groups were residing in housing classified as "good" or "excellent."

The condition of the family residence was rated by the interviewer following a visit at each home. An "excellent" rating referred to a residence with very few defects. A "good" rating indicated that the residence had a few defects of the type which may be corrected during regular maintenance. A "fair" classification indicated that the residence had many defects of the type which may require major repairs. A "poor" rating was given residences that had many defects which would be difficult to correct through maintenance or major repair.

Table VII-4. Frequency of the Condition of Family Residence by Treatment Group

Group	Condition of Residence Excellent	Good	Fair	Poor	Chi Square
Experimental	2	13	18	19	2.72
Control	1	9	27	19	

Table VII-5 presents the data regarding ownership status of the residence. Over one-half of the severely disadvantaged families, 63.46 percent of the experimental group and 58.92 percent of the control group, owned the family residence. This finding was anticipated since a large number of the residences were located on small farms owned by the families.

Table VII-5. Frequency of the Ownership Status of Residence by Treatment Group

Group	Ownership Status of Residence Owned	Rented	Tenancy	Other	No Response	Chi Square
Experimental	33	6	9	2	2	7.06
Control	33	15	5	3	0	

Table VII-6 includes the data concerning the resale value of the residence for the control and the experimental groups. The significant chi square value indicates that the resale value of the participants' residences was a function of the treatment group. However, it should be noted that approximately three-fifths, 90.39 percent of the experimental group and 55.19 percent of the control group, of the families in each group were residing in residences where the estimated resale value ranged between $2,000 and $6,000.

Table VII-6. Frequency of the Resale Value of Family Residence by Treatment Group

	Resale Value of Residence						
Group	$0 to $2,000	$2,001 to $4,000	$4,001 to $6,000	$6,001 to $10,000	Over $10,000	No Response	Chi Square
Experimental	16	20	11	2	2	1	19.46**
Control	11	9	11	12	2	11	

**Significant at the .01 level

Tables VII-7, VII-8 and VII-9 present the data concerning the presence or absence of electricity, indoor bathroom and telephone in the family residence respectively. The chi square values obtained indicate that the presence or absence of these modern conveniences were not a function of the treatment group classification.

A slightly higher percentage of the families in the experimental group than the control group did not have electricity in their residence, these percentages were 13.46 and 3.54 respectively.

In each treatment group nearly one-half of the family residences, 44.21 percent of the experimental group and 48.21 percent of the control group, did not have indoor bathrooms.

In regard to a telephone in the family residence, the data collected revealed that approximately two-thirds (63.46 percent of the experimental group and 67.86 percent of the control group) of the families in each group had telephones.

Table VII-7. Frequency of Presence or Absence of Electricity in Homes by Treatment Group

Group	Electricity in Residence No	 Yes	Corrected Chi Square
Experimental	7	45	2.28
Control	2	54	

Table VII-8. Frequency of Presence or Absence of An Indoor Bathroom in the Homes by Treatment Group

Group	Indoor Bathroom in Residence No	 Yes	Corrected Chi Square
Experimental	23	29	.05
Control	27	29	

Table VII-9. Frequency of Presence or Absence of a Telephone in the Family Residence by Treatment Group

Group	Telephone in Residence No	 Yes	Corrected Chi Square
Experimental	33	19	0.08
Control	38	18	

Farm business. Tables VII-10 and VII-11 contain data concerning the presence or absence of a farm business and the income derived from the family farm. The chi square values indicate that the presence or absence of a farm business and also the income received from the farm were not functions of the treatment group classification.. Almost three-fifths of the families in each of the groups had some kind of farm business from which 23.08 percent of the experimental group families and 32.14 percent of the control group families derived over one-half of their family income.

Table VII-10. Frequency of the Presence or Absence of Farm Business by Treatment Group.

Group	Farm Business No	Farm Business Yes	Corrected Chi Square
Experimental	21	31	0.02
Control	23	33	

Table VII-11. Frequency Where Farm Provides One-Half or More of the Family Income by Treatment Group

	One-half of Family Income from Farm				
Group	No Farm	No	Yes	No Response	Chi Square
Experimental	21	16	12	3	3.11
Control	23	15	18	0	

Table VII-12 includes the data concerning the size of farms operated by families in the treatment groups. The chi square value calculated indicates that the size of the family farm was not a function of treatment group classification. Of the families operating a farm business, 64.51 percent of the experimental group and 39.38 percent of the control group had farms that consisted of less than 80 acres.

Table VII-12. Frequency of Different Sizes of Farms Operated by Families by Treatment Group

	Size of Farm						
Group	No Farm	0-10 acres	11-40 acres	41-80 acres	More than 80 acres	No Response	Chi Square
Experimental	21	6	9	5	9	2	6.00
Control	23	3	5	5	19	1	

The presence or absence of livestock, fruit and vegetable enterprises on the farms were not functions of the treatment group classification. The experimental and control groups were similar in that a majority (77.42 percent of the experimental group and 75.76 percent of the control group) of the families in both groups who operated farms had livestock. Fruit was produced by only 3.22 percent of the experimental group families and none of the control group that operated farms. Vegetables were not commonly raised by the families included in the two groups. Tables VII-13 through VII-15 report the data collected.

Table VII-13. Frequency of Presence or Absence of Livestock Enterprise on Farms by Treatment Group

	Livestock Enterprise			
Group	No	Yes	No Response (No Farm)	Chi Square
Experimental	7	24	21	0.03
Control	8	25	23	

Table VII-14. Frequency of Presence or Absence of Fruit Enterprise on Farms by Treatment Group

	Fruit Enterprise			
Group	No	Yes	No Response (No Farm)	Chi Square
Experimental	30	1	21	1.09
Control	33	0	23	

Table VII-15. Frequency of Presence or Absence of Vegetable Enterprise on Farm by Treatment Group

	Vegetable Enterprise			
Group	No	Yes	No Response (No Farm)	Chi Square
Experimental	21	10	21	5.31
Control	30	3	23	

The presence or absence of crop enterprises was a function of the treatment group classification as revealed by the significant chi square in Table VII-16. Sixty percent of the families in the experimental group and 87.87 percent of the control group who operated farms had crop enterprises.

Table VII-16. Frequency of the Presence or Absence of Crop Enterprise on Farms by Treatment Group

Group	Crop Enterprise No	Yes	No Response (No Farm)	Chi Square
Experimental	13	18	21	7.29*
Control	4	29	23	

*Significant at the .05 level.

Families receiving financial aid. Table VII-17 shows whether or not some type of financial aid was received by family members in the treatment groups. The chi square value obtained indicates that the presence or absence of financial aid was not a function of the treatment group classification. The data reveal that slightly over four-fifths (82.58 percent of the experimental group and 80.38 percent of the control group) of the families in each group did not receive any kind of financial aid. A summary of the sources of financial assistance received by families in the two treatment groups is presented in Table VII-18. Chi square values were computed for each type of financial assistance to determine if the treatment group classification was a function of the sources of financial aid. None of the chi square values were significant at the .05 level.

Table VII-17. Frequency of Families Who Received Some Type of Financial Aid by Treatment Group

Group	Receiving Some Type of Financial Aid No	Yes	Corrected Chi Square
Experimental	43	9	0.00
Control	45	11	

Table VII-18. Sources From Which Families Received Financial Assistance and Frequency of Families Receiving Financial Assistance from Each Source by Treatment Group

Source	Experimental Group	Control Group
Pension	0	1
Social Security	7	6
Aid for Dependent Children	2	6
Unemployment	1	0
Disability Payments	0	5
Other Financial Assistance	1	1

Race and nationality of family members. Table VII-19 includes the race of family members in the treatment groups. The chi square value obtained indicates that the race of members of the families was not a function of the treatment group classification. Of the families included, 96.15 percent of the experimental group and 94.65 percent of the control group were Caucasian. The remaining families in each group were Negro.

The data collected regarding the nationality of the husband and wife revealed that less than two percent of the families in each of the treatment groups identified themselves with a foreign nationality. None of the families in either group commonly spoke a foreign language.

Table VII-19. Frequency of the Race of Families by Treatment Group

	Race of Families		Corrected
Group	Caucasian	Negro	Chi Square
Experimental	50	2	0.1069
Control	52	4	

Data analysis show that only two of the 28 variables studied indicate a significant difference between the two treatment groups. The resale value of home and crops grown on the farm indicated a significant departure from the expected. However, in general, the data supports the notion that the treatment groups were indeed similar regarding environmental conditions.

Characteristics of adults. The data collected were applicable to either the head of the household and/or all adults in the home. The dimensions measured depict ages, occupations, and places of residence for adults and family.

Place of birth, childhood residence, and previous address of adults in the treatment groups indicated no significant difference at the .05 level when tested with the chi square statistic. These findings, reported in Tables VII-20 through VII-22, support the thesis that the treatment groups are representative of the same population. Present and adjoining counties were dominant places of birth. Over one-half of the adults (56.84 percent of the experimental group and 57.25 percent of the control group) were born in the county in which they resided at the time of the study. An additional 19.32 percent of the experimental group and 16.39 percent of the control group were born in an adjoining county.

The childhood residence of adults in the treatment groups was frequently (62.59 percent of experimental group and 61.48 percent of control groups) in the county in which they resided at the time of the study.

It should be noted that 67.05 percent of the adults in the experimental group and 65.72 percent of the adults in the control group had a previous address that was in the same county in which they resided at the time the study was made.

Table VII-20. Frequency of Place of Birth for Adults by Treatment Group

Group	Place of Birth Out of State	 Present County	 Adjoining County	 Another County	Chi Square
Experimental	11	50	17	10	4.21
Control	19	63	18	10	

Table VII-21. Frequency of Adults' Childhood Residence by Treatment Group

Group	Childhood Residence of Adults Out of State	 Present County	 Adjoining County	 Another County	 No Response	Chi Square
Experimental	9	57	13	4	8	6.28
Control	15	67	13	11	3	

Table VII-22. Frequencies of Previous Address of Adults by Treatment Group

Group	Previous Address of Adults Out of State	 Present County	 Adjoining County	 Another County	 No Response	Chi Square
Experimental	9	65	9	8	5	2.30
Control	7	69	8	15	6	

The frequency of the present adult occupations indicate that the treatment groups are representative of same population. The present occupation of adults in both groups tended to gravitate toward agriculture and home economics classifications. Over three-fifths (74.46 percent of the experimental group and 62.95 percent of the control group) of the adults' occupations in each group fell in these two groupings. Table VII-23 reports the occupational frequency for the treatment groups.

Table VII-23. Frequencies of Present Occupations of Adults by Treatment Group

	Occupations of Adults								
Group	Unemployed	Agriculture	Business	Industry	Home Economics	Health	Other	No Response	Chi Square
Experimental	1	31	9	7	42	1	2	5	13.55
Control	7	27	5	14	46	3	6	1	

The means for selected variables related to adults were compared using analysis of variance. The analysis of variance for each variable is presented in Table VII-24. For the purpose of these analyses, the difference between the mean of the experimental group and the control group were considered. Differences among replications means and the interaction between the treatment groups and the replications were not considered relevant.

There was a significant difference at the .01 level between the treatment groups for years of education completed by the heads of households. The family heads in the experimental group had completed 7.1 years of school compared to 8.5 years of education for the family heads in the control group. There was no significant difference between the means for the treatment groups regarding age of the head of household, years in present occupation, miles to present job, years since family last moved, and years family lived at previous address. Household heads for both groups were approximately 40 years of age.

Mean years that the family heads had worked at present occupation were found to be 10.8 years for the experimental group and 14.3 years for the control group. Both treatment groups reported miles to present job as 3.5 miles when rounded to nearest tenth.

Data related to years since families had last moved and the number of years lived at previous address indicate that families included in the treatment groups were not mobile. A mean of 9.8 years was determined as the length of time since families in the experimental group had last moved. This may be compared to 10.8 years for families in the control group on the same variable. The families in the experimental group lived at their previous address for 4.7 years compared to 5.2 years for families in the control group.

Data analysis of adults shows that only one variable was significantly different between the treatment groups, that being year of school completed by the head of the household. Generally speaking, occupations, ages, and places of residence were similar for the two groups.

Table VII-24. Comparison of Means for Selected Variables Relating to Heads of Households and Families by Treatment Group

Variable	Source of Variation	Degrees of Freedom	Sum of Squares	F Ratio
Age of Head of Household	Treatment	1	484.90	3.91
	Replication	4	220.41	
	Interaction	4	586.34	
	Within	98	123.98	
Years of Education Completed by Head of Household	Treatment	1	49.90	8.49**
	Replication	4	83.17	
	Interaction	4	35.30	
	Within	98	5.88	
Years in Present Occupation for Head of Household	Treatment	1	304.00	3.93
	Replication	4	161.92	
	Interaction	4	219.58	
	Within	98	77.44	
Miles to Present Job for Head of Household	Treatment	1	0.04	.00
	Replication	4	57.03	
	Interaction	4	13.28	
	Within	98	43.61	
Years Since Family Last Moved	Treatment	1	26.42	.30
	Replication	4	179.54	
	Interaction	4	100.16	
	Within	98	88.73	
Years Family Lived at Previous Address	Treatment	1	3.33	.09
	Replication	4	33.94	
	Interaction	4	71.75	
	Within	98	36.70	

**Significant at the .01 level

Characteristics of Children

Children at home. The chi square values reported in Tables VII-25 and VII-26 indicate that the place of birth and present situation of children at home were not functions of the treatment group classification. Approximately three-fourths (78.32) percent of the experimental group and 73.16 percent of the control group) of the children at home in both groups were born in the county in which they resided at the time the study was made.

The situation of children at home in both groups was also similar in that 85.02 percent of the children in the experimental group and 88.12 percent of the children in the control group who lived at home were students.

Table VII-25. Frequency of Place of Birth for Children at Home by Treatment Group

Group	Birth Place Out of State	Present County	Adjoining County	Another County	Chi Square
Experimental	3	188	24	19	7.66
Control	10	169	24	28	

Table VII-26. Frequency of Present Situation of Children at Home by Treatment Group

Group	Situation of Children Student	Employed	Unemployed	No Response	Chi Square
Experimental	176	10	8	11	2.60
Control	178	13	4	7	

Children away from home. The present address and occupation of children away from home were not functions of the treatment group classification as revealed by the non-significant chi square reported in Tables VII-27 and VII-28. The data indicate that the children who left home tended to go in many directions. However, 20.36 percent of the children in the experimental group and 29.22 percent of the children in the control group remained in the same county as their parents or an adjoining county.

The present occupations of children away from home represented a broad spectrum of occupations, as shown in Table VII-28. Of the responses received for this variable, approximately one percent of the children in each group were unemployed at the time the study was made.

Table VII-27. Frequency of Present Address of Children Away from Home by Treatment Groups

Group	Present Address Out of State	Present County	Adjoining County	Another County	No Response	Chi Square
Experimental	13	21	11	13	25	5.60
Control	21	46	18	38	34	

Table VII-28. Frequency of Occupation of Children Away From Home by Treatment Groups

	Occupation of Children							
Group	Unemployed	Agriculture	Business	Industry	Home Economics	Health	Student	Chi Square
Experimental	1	8	8	12	17	1	5	9.93
Control	2	9	13	24	49	2	1	

Parental Wishes for Their Children

An interview schedule was designed and employed to obtain information regarding the parental wishes for children who were twelve years of age or older and living at home at the time of the pretest. The following is a report of that data.

As a preliminary step, the frequencies of children who were twelve years of age or older in the various age classifications were tabulated by treatment group to establish the similarity of the children for whom parents were expressing their wishes. The non-significant chi square value indicates that the age classification was not a functinn of the treatment group as shown in Table VII-29. Of these children, 85.65 percent were less than 18 years of age.

Table VII-29. Frequency of Children by Age and Treatment Group

	Age Groups					
Group	12-13	14-15	16-17	18-19	20 and over	Chi Square
Experimental	27	36	36	7	8	6.94
Control	40	31	33	15	4	

Frequencies of the amount of income parents desired for sons and daughters when adults are reported in Tables VII-30 and VII-31, respectively. The chi square values indicate that the income classification was not a function of the treatment classification for the sons or daughters.

Table VII-30. Frequency of Amount of Income Parents Desired For Sons by Treatment Group

	Income Desired for Sons					
Group	$6,000 or less	$6,001 to $8,000	$8,001 to $10,000	Over $10,000	Do Not Know	Chi Square
Experimental	15	6	6	6	12	6.23
Control	8	12	10	4	8	

It was noted that nearly one-half of the treatment group parents, 46.67 percent of the experimental group and 47.62 percent of the control group, desired an income of less than $8000 for their sons when adults. About one-half, 44.44 percent of the experimental group and 54.04 percent of the control group parents, desired income of less than $8000 for the daughters.

Table VII-31. Frequency of Amount of Income Parents Desired for Daughters When Adults by Treatment Group

	Income Desired for Daughters				
Group	$6000 or Less	$6001 to $8000	$8001 to $10,000	Do Not Know	Chi Square
Experimental	9	3	5	10	0.93
Control	13	7	6	11	

A substantial portion of the parents in both treatment groups, 22.99 percent for boys and 32.81 percent for the girls, did not know what level of income they desired for the child. Over one-fourth of the responses, 34.38 percent for the girls and 26.44 percent for the boys, were for income levels of $6000 or less. None of the girls' parents and 11.49 percent of the boys' parents desired incomes of over $10,000 for the children when adults.

Frequencies of place of residence that parents desired for sons are reported in Table VII-32. The chi square value was significant at the .05 level indicating that the residence classification was a function of the treatment group.

Table VII-32. Frequency of Place of Residence Parents Desired for Sons When Adults by Treatment Group

	Residence Desired for Sons					
Group	Rural	Small Town	City	Do Not Know	Up to Child	Chi Square
Experimental	10	9	3	8	15	13.11*
Control	22	10	3	3	4	

* Significant at the .05 level

The treatment groups had similar percentages of frequencies for "small town" and "city." These percentages were 20.00 as compared to 23.81 and 6.67 as compared to 7.14 respectively for the parents of the experimental and control groups.

The largest differences in proportion of frequencies between treatment groups occurred in the "rural" and "up to child" categories. One-third of the parents in the experimental group as compared to approximately one-tenth (9.52 percent) of the control group left the place of residence up to the son. Almost one-fourth of the experimental group (22.22 percent) and 52.38 percent of the control group responses were for a rural place of residence for the son.

The chi square value was not significant for the place of residence parents desired for their daughters. Table VII-33 shows that 35.94 percent of the parents in the sample desired a rural residence for their daughters.

Table VII-33. Frequency of place of Residence Parents Desired for Daughters When Adults by Treatment Group

	Residence Desired for Daughter					
Group	Rural	Small Town	City	Do Not Know	Up to Child	Chi Square
Experimental	7	7	0	5	8	9.06
Control	16	6	6	4	5	

Approximately one-fifth, 20.31 percent, of the parents in the sample left place of residence up to their daughters.

A low number of parents exhibited a desire for the city as a place of residence for both sexes of children. Only 6.67 percent of the parents in the experimental group and 7.14 percent of the parents in the control group selected the city as a place of residence for their sons. For their daughters, 16.22 percent of the parents in the control group and none of the parents in the experimental group desired the city as a place of residence.

Tables VII-34 through VII-39 include the data concerning financial support that parents estimated would be available for their childrens' post-secondary education. The chi square values indicate that the financial support classification was not a function of the treatment group classification when four of the five sources were considered in turn. The chi square value was significant for the portion of support parents thought their children would be able to obtain from outside sources.

The frequency of parental estimate of family annual financial support available for post-secondary education per child is shown in Table VII-34.

Table VII-34. Frequency of Parental Estimate of Annual Family Financial Support for Post-Secondary Education Per Child by Treatment Group

Group	Family Financial Support Available None or Do Not Know	 $500 or less	 More than $500	Chi Square
Experimental	43	2	4	3.38
Control	42	8	4	

A few of the parents, 12.24 percent of the experimental group and 22.22 percent of the control group, estimated that they would be able to provide some financial support for post-secondary education of their children. The remaining parents either estimated no financial support was available from the family or that they did not know how much support would be available per child.

The level of cost of one year of post-secondary education as estimated by parents for one child is presented in Table VII-35. Nearly one-half, 51.02 percent of the experimental group and 37.04 percent of the control group, of the parents did not know the cost of one year of post-secondary education. Approximately one-fourth of the parents, 28.57 percent of the experimental group and 24.07 percent of the control group, estimated the cost at less than $1000.

Table VII-35. Frequency of Parental Estimate of Level of Cost of One Year of Post-Secondary Education by Treatment Group

Group	Estimated Cost Do Not Know	 Less Than $1,000	 $1,001 to $1,500	 $1,501 to $2,000	 More than $2,000	Chi Square
Experimental	25	14	3	6	1	7.41
Control	20	13	7	6	8	

Table VII-36 reports the estimated amount of annual support the family would have liked to provide for each child for post-secondary education.

A slightly higher percentage of the parents in the experimental group than in the control group did not know the portion of the support they would be able to provide for their childrens' post-secondary education. These percentages were 42.86 and 31.48 respectively. It was also observed that the percentage of families who indicated they would be able to provide over 50 percent of their childrens' post-secondary educational cost were higher for the experimental group than the control group, 22.45 and 9.26 respectively.

Table VII-36. Frequency of Parental Estimate of Portion of Financial Support the Family Would Like to Provide for Each Child's Post-Secondary Education by Treatment Group

	Percentage of Support				
Group	None or Do Not Know	Up to 25 Percent	26-50 Percent	Over 50 Percent	Chi Square
Experimental	21	6	11	11	7.34
Control	17	14	18	5	

Frequencies of responses to the different levels of support that parents thought the child should provide for his post-secondary education are shown in Table VII-37.

Table VII-37. Frequency of Parental Estimate of Portion of Financial Support A Child Should Contribute to His Post-Secondary Education by Treatment Group

	Portion of Support					
Group	None or Do Not Know	Up to 25 Percent	26-50 Percent	51-75 Percent	76-100 Percent	Chi Square
Experimental	14	4	16	3	12	8.55
Control	6	9	22	8	9	

Approximately one-third of the parents, 32.65 percent of the experimental group and 40.74 percent of the control group, indicated that the child should provide one-fourth to one-half of the cost for his post-secondary education. An additional 30.61 percent of the experimental group and 31.48 percent of the control group indicated that the child should provide over one-half of his post-secondary educational expenses.

Presented in Table VII-38 are the data concerning the parents' estimates of the portion of financial support their children could expect from sources outside of the family, such as scholarships and loans. Approximately three-fourths of the treatment group families, 77.55 percent of the experimental group and 61.11 percent of the control group, did not know what portion of the childrens' financial support for post-secondary education could be obtained from outside sources or thought that none would be available. A higher percentage of the control group than the experimental group thought that up to

25 percent of the childrens' post-secondary education could come from sources outside the family. These percentages were 27.78 and 8.16 respectively.

Table VII-38. Frequency of Parental Estimate of Portion of Financial Support Thought to be Available for Childrens' Post-Secondary Education from Outside Sources by Treatment Group

	Portion of Support			
Group	None or Do Not Know	Up to 25 Percent	26-75 Percent	Chi Square
Experimental	38	4	7	6.57*
Control	33	15	6	

*Significant at the .05 level

Occupations and Organizations of Parents

An instrument was designed to obtain information that would enable the researchers to appraise the information regarding the occupations and organizations in which parents in the treatment groups were involved. Tables VII-39 and VII-40 include the marketable skills possessed by the husband and wife respectively. Parents could list more than one skill precluding the use of the chi square statistic; thus, only frequencies are presented.

As shown in Table VII-39, the major skills possessed by the husbands were primarily of an agricultural or industrial nature with approximately one-third of the parents in the treatment groups in each category. The percentages for the experimental and control groups were 40.38 as compared to 39.32 respectively for agricultural skills possessed and 32.69 and 45.30 respectively for industrial skills possessed.

Table VII-39. Frequency of Husbands' Marketable Skills by Treatment Group

	Major Marketable Skills				
Group	None	Agricultural	Business	Industrial	Other
Experimental	2	21	5	17	7
Control	0	46	10	53	8

As shown in Table VII-40, nearly two-thirds, 65.08 percent of the experimental group wives and 63.01 of the control group wives, reported having skills in the occupational area of home economics.

Approximately one-tenth of the wives in the combined treatment groups reported possessing skills in the occupational areas of business, industrial and health occupations.

Table VII-40. Frequency of Wives' Major Marketable Skills by Treatment Group

	Area of Skill					
Group	None	Business	Industrial	Home Economics	Health Education	Other
Experimental	5	5	7	41	3	2
Control	1	8	7	46	7	2

Tables VII-41 and VII-42 present the data concerning the skill training desired by the husband and wife respectively for the job held at the time of the pretest. The chi square values indicated that the training desired classification was statistically independent from the treatment group classification.

Table VII-41. Frequency of Occupational Training Husbands Desired for Job Held by Treatment Group

	Training Desired		Adjusted
Group	No	Yes	Chi Square
Experimental	37	9	.79
Control	36	15	

Table VII-42. Frequency of Occupational Training Wives Desired For Job Held by Treatment Group

	Training Desired		Adjusted
Group	No	Yes	Chi Square
Experimental	46	4	.29
Control	46	7	

Included in Tables VII-43 and VII-44 are the data regarding the job satisfaction as expressed by the husband and wife respectively. The job satisfaction classification was not a function of the treatment group classification for the wives' or the husbands' responses.

Table VII-43. Frequency of Husbands' Satisfaction with Job Held by Treatment Group

	Job Satisfaction			Chi
Group	No	Yes	No Response or Unemployed	Square
Experimental	8	33	5	.46
Control	11	36	4	

Most of the husbands were satisfied with their present job. Of the total sample, 71.74 percent of the husbands in the experimental group and 70.59 percent of the husbands in the control group responded affirmatively.

The proportion of wives dissatisfied with their job was similar for the two treatment groups. Dissatisfaction was reported by 16.67 percent of the experimental group and 16.98 percent of the control group wives. In the control group, 83.33 percent of the wives responded that they were satisfied, with none unemployed or not responding. In the experimental group, 70.00 percent of the wives indicated that they were satisfied with their job, while 16.00 percent were unemployed or did not respond. The eight wives in the experimental group who indicated that they were unemployed were not included in the analysis.

Table VII-44. Frequency of Wife's Satisfaction with Present Job Held by Treatment Group

	Job Satisfaction		Adjusted
Group	No	Yes	Chi Square
Experimental	7	35	0.00
Control	9	44	

Frequencies of other kind of job desired other than the one held by husband and wife are summarized in Tables VII-45 and VII-46.

Table VII-45. Frequency of Husbands Who Desired Different Jobs by Treatment Group

	Type of Job				
Group	None	Agricultural	Industrial	Other	Chi Square
Experimental	27	4	10	5	3.27
Control	32	8	5	6	

Over one-half the husbands in the two groups, 60.82 percent, desired no other jobs. Industrial, agricultural, and other jobs were desired by 15.46, 12,37 and 11.34 percent respectively of the husbands.

Table VII-46 exhibits the frequencies of wives who desired a different job than the one held at the time of the pretest. A majority of the wives in each group did not desire a different job than the one held at the time of the pretest.

Table VII-46. Frequency of Wives Who Desired Different Jobs by Treatment Group

Group	Desired Different Job		Adjusted Chi Square
	No	Yes	
Experimental	42	8	.36
Control	41	12	

The frequency of new marketable skills desired by husbands and wives are reported in Tables VII-47 and VII-48 respectively. The desire for new marketable skills was not a function of the treatment group classification for the husbands or wives. Slightly over one-fourth, 30.43 percent of the experimental and 26.52 percent of the control group, desired new skills. A higher percentage of the wives in the control group than the experimental group desired new marketable skills, 25.93 and 10.00 respectively.

Table VII-47. Frequency of New Marketable Skill Husbands Desired by Treatment Group

Group	Skill Desired			Chi Square
	None	Industrial	Other	
Experimental	32	12	2	2.35
Control	38	8	5	

Table VII-48. Frequency of New Marketable Skill Wives Desired by Treatment Group

Group	Skill Desired		Adjusted Chi Square
	No	Yes	
Experimental	45	5	3.41
Control	40	14	

Tables VII-49 through VII-56 present the data regarding the organizational affiliation and activities of the parents in the treatment groups. The classifications for organizational membership, attendance patterns, committee participation, offices held, and interest in joining organizations were not a function of the treatment group classification for either spouse.

Table VII-49 includes the data concerning the groups or organizations with which husbands in the treatment groups were associated. Approximately one-half of the husbands, 52.08 percent of the experimental group and 45.10 percent of the control group, belonged to one or more groups or organizations.

Presented in Table VII-50 are the data regarding the number of groups or organizations with which the wives were associated. It was noted that about one-half of the wives, 42.00 percent of the experimental group and 50.94 percent of the control group, were associated with one or more organizations or groups.

Table VII-49. Frequency of Groups or Organizations with Which Husbands Were Associated by Treatment Group

Group	Number of Groups or Organizations: One or More	Number of Groups or Organizations: None	Adjusted Chi Square
Experimental	25	23	.24
Control	23	28	

Table VII-50. Frequency of Groups or Organizations With Which Wives Were Associated by Treatment Group

Group	Number of Groups or Organizations: One or More	Number of Groups or Organizations: None	Adjusted Chi Square
Experimental	21	29	.50
Control	27	26	

Data regarding the number of husbands and wives who served on group or organization committees during the year prior to the pretest are included in Tables VII-51 and VII-52. A low percentage of the husbands and wives in the treatment groups had participated in committee work. For the experimental and control groups respectively, the percentages were 8.70 and 3.39 for the husbands and 10.00 and 5.66 for the wives.

Table VII-51. Frequency of Husbands Who Served on Group or Organization Committees by Treatment Group

Group	Committee Assignment One or More	 None	Adjusted Chi Square
Experimental	4	42	.31
Control	2	49	

Table VII-52. Frequency of Wives Who Served on Group or Organization Committees by Treatment Group

Group	Committee Assignment One or More	 None	Adjusted Chi Square
Experimental	5	45	.21
Control	3	50	

Tables VII-53 and VII-54 present the data regarding the number of offices held in groups or organizations during the year prior to the pretest by the husband and wife respectively.

Table VII-53. Frequency of Husbands Who Held Offices in Groups or Organizations by Treatment Group

Group	Office Held No	 Yes	Adjusted Chi Square
Experimental	40	7	.03
Control	43	8	

Relatively few husbands or wives held an office in organizations or groups. Less than one-fifth of the husbands in each treatment group, 14.89 percent of the experimental group and 15.69 percent of the control group, held offices. Even a smaller proportion of the wives held offices. The percentages were 8.70 for the experimental group and 9.26 for the control group.

Table VII-54. Frequency of Wives Who Held Offices in Groups or Organizations by Treatment Group

Group	Office Held No	 Yes	Adjusted Chi Square
Experimental	46	4	.01
Control	49	5	

Tables VII-55 and VII-56 include the data regarding the number of husbands and wives respectively in the treatment groups who were interested in joining an organization other than those to which they belonged at the time of the pretest.

Table VII-55. Frequency of Husbands Interested in Joining An Organization by Treatment Group

Group	Interested in Joining No	Interested in Joining Yes	Adjusted Chi Square
Experimental	44	2	.01
Control	48	3	

Only a few of the husbands and wives were interested in joining organizations other than those to which they belonged at the time of the pretest. The percentages of the husbands who were interested in joining organizations were 4.35 for the experimental group and 5.88 for the control group. Wives interested in joining organizations totaled 0.00 percent for the experimental group and 7.55 for the control group.

Table VII-56. Frequency of Wives Interested in Joining An Organization by Treatment Group

Group	Interested in Joining No	Interested in Joining Yes	Adjusted Chi Square
Experimental	50	0	2.16
Control	49	4	

The data regarding the level of annual income that adult family members estimated as being necessary for adequate living expenses are presented in Table VII-57. The chi square value was not significant indicating that the estimated level of family income needed was not a function of the treatment group classification.

Over one-half, 52.34 percent, of the families in the combined treatment groups estimated that they needed an annual family income between $2000 and $6000 in order to live adequately. Another 26.17 percent of the families said they needed between $6000 and $10,000 per year, and only 10.27 percent said they needed over $10,000 annual income to adequately support their family.

Table VII-57. Frequency of Estimated Level of Annual Family Income Needed by Treatment Group

Group	Income Level $2000 to $4000	 $4001 to $6000	 $6001 to $8000	 $8001 to $10,000	 $10,000 and above	 Do not Know	Chi Square
Experimental	10	19	6	6	3	7	3.69
Control	11	16	10	6	8	5	

Situation and Goals of Children

An interview schedule, designed to obtain data regarding situation and goals of children who were twelve years of age or older and were living at home was employed to obtain the data reported in this section. These data were tabulated by sex. The observed chi square values were non-significant for all variables except one. Thus, in all cases except one, the responses to the classifications of the variables were independent of the treatment group.

The frequencies of boys and girls work experiences by treatment group are presented in Tables VII-58 and VII-59 respectively.

Table VII-58. Frequency of Type of Work Experience of Sons by Treatment Group

Group	Type of Work Experience None	 Agriculture	 Other
Experimental	5	51	16
Control	8	42	8

Whereas the types of work experience was not limited to one per individual, the responses were not mutually exclusive. Thus, a chi square value was not reported.

It was noted that most of the experiences reported by boys, 70.83 percent of the experimental group and 72.41 percent of the control group, were related to agriculture. Over one-half of the work experiences of the girls, 51.52 percent of the experimental group and 61.36 percent of the control group, had been in home economics.

Table VII-59. Frequency of Type of Work Experience of Daughters by Treatment Group

	Type of Work Experience			
Group	None	Agriculture	Home Economics	Other
Experimental	3	7	17	6
Control	7	8	27	2

Presented in Tables VII-60 and VII-61 are the data regarding the type of part-time work desired by sons and daughters respectively. A majority of the sons desired to obtain part-time work in agriculture and industry. The percentage of sons who desired part-time agricultural work was 32.31 for the experimental group and 42.55 for the control group. The percentages of sons who desired part-time industrial work was 24.62 for the experimental group and 17.02 for the control group. Less than one-third of the sons, 20.00 percent of the experimental group and 29.79 percent of the control group did not want part-time work of any kind. The chi square value obtained was not significant indicating that the part-time work classification was not a function of the treatment group classification.

About one-third of the daughters, 37.93 percent of the experimental group and 31.71 percent of the control group, desired part-time work experience in home economics. Over one-third of the daughters, 41.38 percent of the experimental group and 36.59 percent of the control group, did not want any type of part-time work.

Table VII-60. Frequency of Type of Part-Time Work Sons Desired by Treatment Group

	Part-Time Work Desired				
Group	None	Agricultural	Industrial	Other	Chi Square
Experimental	13	21	16	15	4.96
Control	14	20	8	5	

Table VII-61. Frequency of Type of Part-Time Work Daughters Desired by Treatment Group

	Part-Time Work Desired			
Group	None	Home Economics	Other	Chi Square
Experimental	12	11	6	1.05
Control	15	13	13	

Reported in Tables VII-62 and VII-63 are the data regarding the type of population area in which sons and daughters respectively desired to live during their adult life. A majority of the sons, 50.00 percent of the experimental group and 62.50 percent of the control group, desired to live in a rural area. About one-eighth of the sons in the treatment groups, 12.90 percent of the experimental group and 16.67 percent of the control group, desired to live in a city. Approximately equal proportions of daughters in each treatment group expressed the desire to live in the city, small town, and rural area, as shown in Table VII-62.

Table VII-62. Frequency of Type of Population Area in Which Sons Would Like to Live by Treatment Group

	Population Area				
Group	Rural	Small Town	City	Do Not Know	Chi Square
Experimental	31	11	8	12	3.77
Control	30	6	8	4	

Table VII-63. Frequency of Type of Population Area in Which Daughters Would Like to Live by Treatment Group

	Population Area				
Group	Rural	Small Town	City	Do Not Know	Chi Square
Experimental	8	7	10	4	.71
Control	11	11	11	8	

The data regarding the level of income desired by sons and daughters respectively during their adult lives are included in Tables VII-64 and VII-65. Nearly one-fourth of the boys, 20.97 percent of the experimental group and 25.00 percent of the control group did not know what level of income they would like to earn. A higher percentage of the control group than the experimental group desired an income of $6,000 or less, 37.50 and 19.35 respectively.

Approximately one-third of the daughters in the combined treatment groups, 41.38 percent of the experimental group and 24.39 percent of the control group, did not know what level of family income they desired to have for their adult life. Again, a higher percentage of the daughters in the control group than the experimental group desired family incomes of less than $6,000, 56.10 and 41.38 respectively.

Table VII-64. Frequency of Level of Income Sons Desired by Treatment Group

Group	Income Desired $4000 or less	$4000 to $6000	$6000 to $8000	$8000 to $10,000	$10,000 and over	Do Not Know	Chi Square
Experimental	4	8	11	16	10	13	9.16
Control	4	14	2	8	8	12	

Table VII-65. Frequency of Level of Income Daughters Desired by Treatment Group

Group	Income Desired $4000 or less	$4000 to $6000	$6000 to $8000	Do Not Know	Chi Square
Experimental	4	8	5	12	2.97
Control	11	12	8	10	

Tables VII-66 and VII-67 include the data regarding the type of work sons and daughters respectively desired for their career at the time of the pretest. About two-thirds of the sons in both groups desired to have a career in an agricultural or industrial occupation. The percentages of sons desiring a career in agricultural occupations were 33.87 for the experimental group and 27.08 for the control group; while the percentages for those desiring a career in an industrial occupation were 29.03 for the experimental group and 50.00 for the control group.

Nearly one-half of the daughters, 55.17 percent of the experimental group and 36.59 percent of the control group, desired a career in business.

Table VII-66. Frequency of Type of Work Sons Desired for Career by Treatment Group

Group	Type of Career Desired No Response	Agricultural	Industrial	Other	Chi Square
Experimental	6	21	18	17	5.51
Control	2	13	24	9	

Table VII-67. Frequency of Type of Work Daughters Desired for Career by Treatment Group

Group	Type of Career Desired No Response	Business	Other	Chi Square
Experimental	1	16	12	2.38
Control	2	15	24	

Included in Tables VII-68 and VII-69 are the data regarding the level of financial contribution that the sons and daughters respectively were contributing per year to their education at the time of the pretest. Over one-half of the sons, 56.45 percent of the experimental group and 56.25 percent of the control group were contributing some financial assistance toward the purchases of clothes, books, and other school expenses. A higher percentage of the sons in the control group than the experimental group were contributing over $100 annually toward their education, 35.42 and 25.81 respectively.

Table VII-68. Frequency of the Level of Son's Financial Contribution to His Education by Treatment Group

	Contribution to Education					
Group	None	Less Than $50	$50 to $100	$101 to $300	More Than $301	Chi Square
Experimental	27	11	8	6	10	4.65
Control	21	8	2	10	7	

Table VII-69. Frequency of The Level of Daughter's Financial Contribution to Her Education by Treatment Group

	Contribution to Education			
Group	None	Less Than $50	More Than $50	Chi Square
Experimental	25	2	2	8.21*
Control	22	8	11	

*Significant at the .05 level

Most of the girls, 86.21 percent of the experimental group and 53.66 percent of the control group, made no financial contribution toward their own education. None of the girls contributed more than $100 annually toward their own education. The chi square value was significant; thus, the contribution to education was not independent of the treatment group classification.

Tables VII-70 and VII-71 included the data regarding the level of savings sons and daughters respectively had for their post-secondary education. Approximately three-fourths of the sons, 74.19 percent had no savings for this purpose. None of the sons had more than $150 saved for their post-secondary education.

Table VII-70. Frequency of Level of Son's Savings for Post-Secondary Education by Treatment Group

	Educational Savings			
Group	None	Less Than $100	More Than $100	Chi Square
Experimental	46	12	4	2.68
Control	40	4	4	

Over three-fourths of the daughters, 89.66 percent of the experimental group and 75.61 percent of the control group, had no savings for post-secondary education.

Table VII-71. Frequency of Level of Daughter's Savings For Post-Secondary Education by Treatment Group

	Educational Savings		Adjusted
Group	Some	None	Chi Square
Experimental	3	26	1.38
Control	10	31	

Presented in Tables VII-72 and VII-73 are the data concerning the portion of post-secondary education costs that the sons and daughters respectively expected their parents to provide at the time of the pretest. Nearly one-half of the sons, 56.45 percent of the experimental group and 37.50 percent of the control group, did not know what percent of the costs of their post-secondary education would be paid by their families. Fifty percent of the sons in the control group as compared to 33.87 percent of the experimental group expected their parents to provide over 25 percent of their post-secondary educational expenses.

Nearly one-half of the daughters in the combined treatment group, 51.72 percent of the experimental group and 36.59 percent of the control group did not know what portion of the cost of their post-secondary education they could expect from their parents. Nearly one-fifth of the daughters in the experimental and control groups, 17.24 percent and 19.51 percent respectively, expected their parents to provide more than 50 percent of the cost of their post-secondary education.

Table VII-72. Frequency of Portion of Post-Secondary Educational Expenses the Sons Expected Their Families to Provide by Treatment Group

Group	Percent of Costs				Chi Square
	Do Not Know	0-25 Percent	26-50 Percent	51 Percent or More	
Experimental	35	6	14	7	4.03
Control	18	6	17	7	

Table VII-73. Frequency of Portion of Post-Secondary Educational Expenses Daughters Expected Their Families to Provide by Treatment Group

Group	Percent of Costs				Chi Square
	Do Not Know	0-25 Percent	26-50 Percent	51 Percent or More	
Experimental	15	3	6	5	1.68
Control	15	6	12	8	

Orientations of sons' and daughters' strongest desires as reported at the time of the pretest are reported in Tables VII-74 and VII-75 respectively. The children indicated their desires which the interviewers classified as being oriented toward an occupation, education, material goods, and family. Some children did not know what their strongest desire was.

Approximately one-third of the sons in the experimental and control groups had, as their strongest desire, a desire that was occupationally oriented; 32.26 percent and 39.58 percent respectively. About one-fifth of the treatment groups' strongest desires were oriented toward some type of education; the percentages were 20.97 and 18.75 respectively.

Table VII-74. Frequency of the Orientation of the Strongest Desire of Sons by Treatment Group

Group	Orientation Desire				Chi Square
	Occupational	Educational	Material	Do Not Know	
Experimental	20	13	23	6	2.76
Control	19	9	12	8	

Nearly equal proportions of the daughters' strongest desires were oriented toward education and material objects. A higher percentage of the desires of daughters in the control group than in the experimental group were occupationally oriented, 31.71 and 17.24 respectively.

Table VII-75. Frequency of the Orientation of the Strongest Desire of Daughters by Treatment Group

	Orientation Desire					
Group	Occupational	Educational	Materialistic	Family	Do Not Know	Chi Square
Experimental	5	6	12	1	5	3.51
Control	13	7	15	3	3	

Goals of the Farm Business Operation

An instrument designed to obtain data pertaining to the objectives of farm business operators was employed to determine production goals. Relative to typical production levels of the enterprises considered, at the time of the pretest the families in the treatment groups generally established production goals which were much lower.

Tables VII-76, VII-77 and VII-78 present the data concerning the farm operator's goals for the level of production for bushels of corn per acre, bushels of soybeans per acre, and pigs per litter respectively. As indicated by the non-signficant chi square values, the levels of production goal classifications were found to be independent of the treatment group classification.

The experimental group as compared to the control group tended to have slightly higher yield goals for corn. Nearly one-third, 31.3 percent, of the experimental group had production goals of 75 bushels per acre or more as compared to 16.7 percent of the control group.

Equal proportions of the farm business operators in the treatment groups who produced soybeans had yeild goals in the classifications of 30 or less and 31 or more bushels per acre. The percentage of farm operators in the experimental and control groups who had yield goals of less than 30 bushels per acre were 55.5 and 47.6 respectively.

Approximately one-third of the farm operators, 41.7 percent of the experimental group and 22.7 percent of the control group, who had swine as an enterprise in their farm business operation, had yield goals of eight or less pigs weaned per litter. Over one-half of the combined treatment groups, 41.7 percent of the experimental group and 63.6 percent of the control group, had established their production goals within the classification of 8.1 to 10 pigs per litter.

Table VII-76. Frequency of Level of Corn Yield Goals by Treatment Group

Group	Bushels Per Acre Less Than 50	 50 to 75	 75 or More	Chi Square
Experimental	1	3	9	1.04
Control	3	9	13	

Table VII-77. Frequency of Level of Soybean Yield Goals by Treatment Group

Group	Bushels Per Acre Less Than 30	 31 or More	Adjusted Chi Square
Experimental	5	4	0.00
Control	10	11	

Table VII-78. Frequency of Level of Goals for Pigs Weaned Per Litter by Treatment Groups

Group	Pigs Per Litter 8.0 or Less	 8.1-10.0	 10.1 or More	Chi Square
Experimental	5	5	2	1.67
Control	5	14	3	

RESULTS

The principal objective of Project REDY was to develop and evaluate a vocationally oriented, family centered educational program for the rural disadvantaged. The educational program was developed based on the needs of the severely disadvantaged rural family members, implemented as a developmental model, and evaluated and revised on the basis of the findings. The exemplary model, the evaluation of which is reported in this section, was evaluated using a pretest-posttest control group design. Presentation of the results is based on the topics included in the data collecting instruments employed for both the pretest and the posttest. These topics are discussed in turn.

For the purpose of establishing the degree of effect that the treatment, the REDY Educational Program, had on the treatment groups, posttest data collected by employing interview schedules were analyzed using the chi square method of statistical analysis. Data obtained by employing standardized instruments and the school data form were analyzed using analysis of covariance.

Parental Desires for Their Children

Data regarding the parental desires for their children are reported in this section.

Occupation. Tables VII-79 through VII-84 include the parents' response to the kind of job they want their children to have for their lifetime work.

Table VII-79. Frequency of Parental Desires Regarding Occupation for Oldest Child Living at Home by Treatment Group

	Type of Response				
Group	No Response	Specific Occupation	Up to Child	Do Not Know	Chi Square
Experimental	0	11	32	2	3.38
Control	2	15	28	4	

Table VII-80. Frequency of Parental Desires Regarding Occupation for Second from the Oldest Child Living at Home by Treatment Group

	Type of Response				
Group	No Response	Specific Occupation	Up to Child	Do Not Know	Chi Square
Experimental	13	6	25	1	5.78
Control	21	8	16	4	

The data in Tables VII-79 through VII-84 indicate that chi square values between responses of the experimental and the control groups concerning the job desired for the first, second, fourth, fifth and sixth child were not significant at the .05 level. However, it should be pointed out that a larger number of the parents in the experimental group than in the control group indicated that it was up to the child to make a decision concerning an occupation.

Table VII-81. Frequency of Parental Desires Regarding Occupation for Third from the Oldest Child Living at Home by Treatment Group

	Type of Response				
Group	No Response	Specific Occupation	Up to Child	Do Not Know	Chi Square
Experimental	29	1	15	0	8.23*
Control	33	3	8	5	

*Significant at the .05 level.

Table VII-82. Frequency of Parental Desires Regarding Occupation for Fourth from the Oldest Child Living at Home by Treatment Group

	Type of Response				
Group	No Response	Specific Occupation	Up to Child	Do Not Know	Chi Square
Experimental	38	0	6	1	3.39
Control	40	2	4	3	

Table VII-83. Frequency of Parental Desires Regarding Occupation for Fifth from the Oldest Child Living at Home by Treatment Group

	Type of Response			
Group	No Response	Up to Child	Do Not Know	Chi Square
Experimental	41	3	1	3.18
Control	46	2	1	

Table VII-84. Frequency of Parental Desires Regarding Occupation for Sixth from the Oldest Child Living at Home by Treatment Group

	Type of Response		Corrected
Group	No Response	Up to Child	Chi Square
Experimental	44	1	.00
Control	48	1	

A significant chi square value was observed for responses to job desired for third from the oldest child, as shown in Table VII-81. Of the experimental group, 64.44 percent of the parents indicated "no response," only 2.22 percent responded to a specific occupation for their third from the oldest child living at home, and none indicated that they did not know, whereas, 10.20 percent of the control group did not know. Of the experimental group, 33.33 percent responded that it was up to the child as compared to 16.33 percent of the control group. None of the parents in the experimental group responded that they did not know, while 10.20 percent of the control group indicated that they did not know.

Level of education. Tables VII-85 through VII-88 present the parental desires for the level of education or training for their children.

Table VII-85. Frequency of Parental Desires Regarding Level of Education for their Oldest Child Living at Home by Treatment Group

	Level of Education							
Group	No Response	High School	Special Vocational	2-year College	4-year College	Up to Child	Do Not Know	Chi Square
Experimental	0	7	15	8	12	3	0	17.29**
Control	2	14	4	5	13	6	5	

**Significant at the .01 level.

Table VII-86. Frequency of Parental Desires Regarding the Level of Education for the Second from the Oldest Child Living at Home by Treatment Group

	Level of Education							
Group	No Response	High School	Special Vocational	2-year College	4-year College	Up to Child	Do Not Know	Chi Square
Experimental	13	7	8	5	6	2	4	9.79
Control	21	8	1	2	9	4	4	

In response to the education desired by parents for the oldest child living at home, Table VII-85, there was a significant chi square value observed which indicates that the educational desire classification was a function of the treatment. Of the experimental group parents, 15.57 percent desired only a high school education for the oldest child living at home, whereas, 28.57 percent of the control group indicated that a high school education was sufficient for this child. There was a much larger response by the experimental group (33.33 percent) than the control group (8.16 percent) concerning the desire for this child to have specialized vocational training. The education classification was not a function of the treatment group with regard to the second, third and fourth from the oldest child living at home, as shown in Tables VII-86 through VII-88.

Table VII-87. Frequency of Parental Desires Regarding the Level of Education for the Third from the Oldest Child Living at Home by Treatment Group

	Level of Education							
Group	No Response	High School	Special Vocational	2-year College	4-year College	Up to Child	Do Not Know	Chi Square
Experimental	29	5	4	1	5	1	0	9.57
Control	33	5	3	1	3	2	2	

Table VII-88. Frequency of Parental Desires Regarding the Level of Education for the Fourth from the Oldest Child Living at Home by Treatment Group

	Level of Education						
Group	No Response	High School	Special Vocational	2-year College	4-year College	Do Not Know	Chi Square
Experimental	38	2	2	1	1	1	1.55
Control	40	2	1	1	3	2	

Level of income. Amount of annual income the parents would like their sons to make as adults is presented in Table VII-89, for which a significant chi square value was observed indicating that the desired income classification was a function of the treatment group.

Table VII-89. Frequency of Parental Desires Regarding Annual Income for Sons to Make as Adults by Treatment Group

	Level of Income							
Group	$2001-4000	$4001-6000	$6001-8000	$8001-10,000	$10,000-or more	Do Not Know	No Response	Chi Square
Experimental	2	3	11	17	4	5	3	16.60*
Control	1	3	2	12	7	11	13	

* Significant at the .05 level.

Approximately 24 percent of the experimental group and four percent of the control group desired an annual income for their sons that ranged between $6,001 and $8,000. Only four percent of the experimental group desired an income of more than $10,000 for their sons in comparison to 14.29 percent of the parents in the control group. A higher percentage of the control group than the experimental group indicated they did not know what income they desired for their sons. This appears to indicate that the parents who did not receive the vocationally oriented educational program did not have sufficient knowledge to make a realistic decision concerning the income they desired for their sons as adults.

As reported in Table VII-90, a significant chi square value was not observed for the variable of annual income the parents desired their daughters to earn as adults.

Table VII-90. Frequency of Parental Desires Regarding Annual Income for Daughters to Make as Adults by Treatment Group

	Level of Income								
Group	$2000- or less	$2001- 4000	$4001- 6000	$6001- 8000	$8001- 10,000	$10,000 or more	Do Not Know	No Response	Chi Square
Experimental	3	3	7	9	6	1	8	8	12.55
Control	0	1	5	7	2	1	19	14	

Location of residence. The responses to where the parents want their children to live when they become adults are presented in Table VII-91.

Table VII-91. Frequency of Parental Desires Regarding Location of Residence of Children as Adults by Treatment Group

	Location of Residence					
Group	Present or Adjoining County	Another Part of Same State	Another State	Up to Child	Do Not Know	Chi Square
Experimental	5	1	1	38	0	9.92*
Control	13	3	1	28	4	

*Significant at the .05 level.

The significant chi square value indicates that the income desire classification was a function of the treatment. A higher percentage of the parents in the experimental group than the control group, 84.44 and 57.14 respectively, indicated that they would leave this decision up to the child. However, it should be pointed out that 26.53 percent of the control group in comparison to only 11.11 percent of the experimental group wanted their children to live in the present or adjoining county when they became adults. This may indicate that in the control group the parents were not adequately oriented to the vocational possibilities in the present or adjoining county.

Reported in Table VII-92 are the parental desires concerning the location of residence, rural or urban, in which they desired their children to reside. The chi square value was significant at the .01 level.

Table VII-92. Frequency of Parental Desires Regarding the Rural or Urban Location of the Residence of their Children as Adults by Treatment Group

	Location of Residence					
Group	In the Country	Small Town	City or Suburban	Up to Child	Do Not Know	Chi Square
Experimental	6	8	1	30	0	18.14**
Control	19	10	6	13	1	

**Significant at the .01 level.

Approximately 39 percent of the parents in the control group in comparison to 13 percent of the experimental group wanted their children to live in a rural area. Only 2.22 percent of the experimental group as compared to 12.25 percent of the control group wanted their children to live in a city or suburb. The greatest variation was the response to leaving the decision up to the child; 66.67 percent of the experimental group and 26.53 percent of the control group.

Financing children's education. Table VII-93 reports the responses of parents concerning the approximate cost for one year of post-secondary education.

Table VII-93. Frequency of Parental Responses Regarding Cost of One Year of Post-Secondary School Training by Treatment Group

	Annual Cost of Post-Secondary Education					
Group	$500 or less	$501-1000	$1001-2000	$2001 or More	Do Not Know	Chi Square
Experimental	2	17	11	5	10	26.11**
Control	0	2	7	11	29	

**Significant at the .01 level.

A significant chi square value was observed between the responses of the experimental and the control groups. Results indicated that 22.22 percent of the experimental group in comparison to 59.18 percent of the control group indicated that they did not know the cost of one year of post-secondary training. It appears from this observation that the educational program had made many of the parents in the experimental group aware of the cost of educational training beyond the secondary level. A higher percentage of the experimental group as compared to the control group, 37.78 and 4.08 respectively, thought the cost would be between $501 and $1000.

Chi square values were not significant with regard to the percentage of the financial support that could be provided by the family, child working, loans and other sources as shown in Tables VII-94, VII-95, VII-97, and VII-98 respectively. There was, however, a significant chi square value, as shown in Table VII-96, regarding the financial assistance that could be provided by scholarships indicating that the percentage of support available from scholarships was a function of the treatment group. The greatest variation in response between the experimental and control group was the indication that up to 25 percent of the financial support could be provided by scholarships; 31.11 percent and 6.12 percent respectively. Of the experimental group, 60.00 percent of the parents indicated that no support could be expected from scholarships or that they did not know, whereas 77.55 percent of the parents' responses in the control group were in the "none" or "do not know" categories.

Table VII-94. Frequency of Parental Responses Regarding Percentage of Financial Support the Family Could Provide for the Children's Post-Secondary Education by Treatment Group

	Percentage of Support						Chi
Group	None	Up to 25	26-50	51-75	76-100	Do Not Know	Square
Experimental	14	13	13	0	0	5	6.90
Control	16	14	10	1	5	3	

Table VII-95. Frequency of Parental Responses Regarding Percentage of Financial Support the Child Should Provide for His Post-Secondary Education by Treatment Group

	Percentage of Support						Chi
Group	None	Up to 25	26-50	51-75	76-100	Do Not Know	Square
Experimental	4	8	21	7	3	3	2.05
Control	4	7	19	9	7	3	

Table VII-96. Frequency of Parental Responses Regarding Percentage of Financial Support Expected from Scholarships Should Their Children Desire Post-Secondary Education by Treatment Group

	Percentage of Support					
Group	None	Up to 25	26-50	76-100	Do Not Know	Chi Square
Experimental	25	14	4	0	2	12.21*
Control	31	3	7	1	7	

*Significant at the .05 level.

Table VII-97. Frequency of Parental Responses Regarding Percentage of Financial Support Expected From Loans Should Their Children Desire Post-Secondary Education by Treatment Group

	Percentage of Support					
Group	None	Up to 25	26-50	51-75	Do Not Know	Chi Square
Experimental	29	9	4	1	2	3.19
Control	32	7	2	3	5	

Table VII-98. Frequency of Parental Responses Regarding Percentage of Financial Support Expected from Other Sources Should Their Children Desire Post-Secondary Education by Treatment Group

	Percentage of Support					
Group	None	Up to 25	26-50	51-75	Do Not Know	Chi Square
Experimental	40	2	1	1	1	4.57
Control	48	0	0	0	1	

Occupations and Organizations of Parents

Data concerning the occupations of the parents and the organizations in which the parents in the treatment groups participated are presented in this section.

Occupations of husbands and wives. Tables VII-99 and VII-100 present the frequencies of the types of occupations in which the husbands and wives respectively were employed at the time of the posttest.

Table VII-99. Frequency of the Type of Occupation in Which the Husbands Were Employed by Treatment Group

	Type of Occupation							
Group	No Response	None	Agricultural	Non-Agricultural Business	Non-Agricultural Industry	Health Occupation	Other	Chi Square
Experimental	6	1	21	9	7	0	3	11.49
Control	5	5	23	1	11	1	5	

Table VII-100. Frequency of the Type of Occupation in Which the Wives Were Employed by Treatment Group

	Type of Occupation							
Group	No Response	None	Agricultural	Non-Agricultural Business	Non-Agricultural Industry	Home Economics	Other	Chi Square
Experimental	1	16	1	2	4	22	1	16.16*
Control	2	3	6	3	8	29	0	

*Significant at the .05 level.

The chi square value was not significant for the type of job in which the husband was employed. There was, however, a significant chi square value observed for the response of the wives as to the type of occupation in which she was employed. The greatest variations in responses between the treatment groups were in the categories of "none" and "home economics." Part of these variations were probably due to the treatment where emphasis was placed on occupations that contributed cash income to the family. If a wife in the experimental group was not employed outside of the home, her response was probably oriented toward not being employed, in lieu of being employed as a homemaker.

New skills learned by adult family members. Summaries of the new job skills learned by the husbands and wives are presented in Tables VII-101 and VII-102. As reported in Table VII-101 a significant chi square value was obtained for the type of new job skills learned by the husbands. Thus, the type of skill classification was a function of the treatment group. The data indicated that 82.35 percent of the control group in comparison to 61.70 percent of the experimental group learned no skills during the year prior to the posttest. This would imply that 17.65 percent of the husbands not receiving the vocationally oriented program learned new skills as compared to 38.30 percent of the husbands receiving the vocationally oriented program who learned new skills.

Table VII-101. Frequency of New Job Skills Husbands Learned During the Year Prior to the Posttest by Treatment Group

Group	Type of Skill						Chi Square
	No Response	None	Agricultural	Non Agricultural Business	Non Agricultural Industry	Health Occupation	
Experimental	5	29	8	3	2	0	11.68*
Control	5	42	1	0	2	1	

*Significant at the .05 level.

Table VII-102. Frequency of the New Job Skills Wives Learned During the Year Prior to the Posttest by Treatment Group

Group	Type of Skill								Chi Square
	No Response	None	Agricultural	Business	Industry	Home Economics	Health	Other	
Experimental	2	34	2	1	3	3	1	1	6.33
Control	2	44	0	0	3	2	0	0	

A significant chi square value was not obtained for the variable of new job skills learned by the wives, as shown in Table VII-102. However, a larger proportion of the wives in the experimental group than in the control group reported learning new job skills during the year prior to the posttest. These percentages were 23.40 and 9.80 respectively.

Other jobs desired by husbands and wives. As presented in Table VII-103, a significant chi square value was obtained for other kinds of jobs desired by the husbands.

Table VII-103. Frequency of Other Kinds of Jobs Husbands Desired by Treatment Group

Group	Type of Job						Chi Square
	No Response	None	Agricultural	Non-Agricultural Business	Non Agricultural Industry	Other	
Experimental	5	23	11	3	4	1	13.52*
Control	5	33	2	1	3	7	

*Significant at the .05 level.

Less than one-half (48.94 percent) of the husbands in the experimental group in comparison to 64.71 percent of the husbands in the control group reported that they would not like to have another kind of job. A majority (57.89 percent) of the husbands in the experimental group wanting another kind of job, desired jobs in agriculture, whereas, only 3.92 percent of the control group, who wanted another kind of job, wanted an agricultural type job.

The data in Table VII-104 represents the responses of the wives with regard to other kinds of jobs they desired. The chi square value was not significant at the .05 level.

Table VII-104. Frequency of Other Kinds of Jobs the Wives Desired by Treatment Group

	Type of Job							
Group	No Response	None	Business	Industry	Home Economics	Health	Other	Chi Square
Experimental	1	32	2	3	7	2	0	7.91
Control	2	39	1	3	1	3	2	

Organization participation by husbands and wives. As shown in Table VII-105, a significant chi square value was not obtained for the responses of the husbands in the treatment groups concerning their participation in civic, fraternal, and political organizations. However, slightly more than 20 percent of the husbands in the experimental group participated in civic, fraternal and political organizations as compared to slightly less than 10 percent of the husbands in the control group who participated in such organizations.

Table VII-105. Frequency of Husbands' Participation in Civic, Fraternal and Political Organizations by Treatment Group

	Frequency of Participation					
Group	No Response	Never	Rarely	Occasionally	Regularly	Chi Square
Experimental	5	30	5	6	1	4.65
Control	6	40	2	3	0	

A significant chi square value was obtained for the responses of the wives in the treatment groups concerning their participation in civic, fraternal and political organizations, as shown in Table VII-106. Approximately 75 percent of the experimental group and nearly 84 percent of the control group said they never participated in such groups. Less than four percent of the control group in comparison to approximately 13 percent of the experimental group indicated that they participated in these organizations occasionally.

Table VII-106. Frequency of Wives' Participation in Civic, Fraternal and Political Organizations by Treatment Group

Group	Frequency of Participation					Chi Square
	No Response	Never	Rarely	Occasionally	Regularly	
Experimental	2	35	4	6	0	9.87*
Control	3	43	0	2	3	

*Significant at the .05 level.

A significant chi square value was obtained for the responses of the husbands in the treatment groups concerning their participation in job related organizations as presented in Table VII-107. In the control group, 70.59 percent of the husbands never participated in organizations related to their jobs and 46.72 percent of the husbands in the experimental group never participated in such organizations.

Table VII-108 includes the data concerning the participation of the wives in job related organizations. The chi square value obtained was not significant. Only a few wives in each treatment group participated in job related organizations.

Based on findings related to husband and wife participation in organizations, it may be concluded that the treatment, the educational program, was effective in changing the social attitude of some adults toward participation in community and job related organizations.

Table VII-107. Frequency of Husbands' Participation in Job Related Organizations by Treatment Group

Group	Frequency of Participation				Chi Square
	No Response	Never	Rarely	Occasionally	
Experimental	5	22	10	10	9.18*
Control	6	36	2	7	

*Significant at the .05 level.

Table VII-108. Frequency of Wives' Participation in Job Related Organizations by Treatment Group

Group	Frequency of Participation					Chi Square
	No Response	Never	Rarely	Occasionally	Regularly	
Experimental	2	38	4	1	2	5.80
Control	3	47	1	0	0	

Situations and Goals of Children Age Twelve and Over Living at Home

This section contains data concerning situations and goals for education and employment of children age twelve and over living at home.

Sex of children and school situation. Table VII-109 shows the number of sons and daughters according to experimental and control group who were twelve years of age and over living at home at the time of the survey. The chi square value was not significant indicating that the sex of the children was not a function of the treatment group.

Table VII-109. Frequency of Sons and Daughters Age Twelve and Over Living at Home by Treatment Group

Group	Children Living at Home		Adjusted Chi Square
	Sons	Daughters	
Experimental	66	36	1.49
Control	53	43	

The educational situation of sons and daughters is presented in Table VII-110. The chi square value was not significant at the .05 level. Approximately 10 percent of the children in each treatment group had left school prior to graduation.

Table VII-110. Frequency of the Various Educational Situations of Children Twelve Years of Age or Older Living at Home by Treatment Group

Group	School Situation				Chi Square
	In School	Graduated	Left School Before 1968-69 School Year	Left School During 1968-69 School Year	
Experimental	83	8	7	4	4.29
Control	78	9	9	0	

Employment situation. Table VII-111 presents a summary of the employment of children twelve years of age or older who were living at home during the year prior to the posttest. The chi square value was not significant. Nearly equal proportions of the experimental and control group were in each of the employment situation classifications, approximately one-half of the children in the treatment groups, 50.00 percent of the experimental group and 52.00 percent of the control group, were non-employed students.

Table VII-111. Frequency of Children's Employment Situation During the Year Prior to the Posttest by Treatment Group

Group	Employment Situation					
	Non-Student Employed Part-time	Non-Student Employed Full-time	Non-Student Unemployed	Student Employed	Student Not Employed	Chi Square
Experimental	6	6	3	39	48	.35
Control	4	6	3	36	47	

Table VII-112 presents the data concerning the field of work in which children twelve years of age or older and living at home were employed during the year prior to the posttest. The chi square value obtained was not significant at the .05 level. The occupations of children in the experimental group tended to cluster in the broad fields of agriculture and industry whereas children in the control group had frequently taken jobs related to agriculture and home economics. Approximately one-fourth (27.45 percent) of the children in the experimental group were employed in jobs related to agriculture compared to 21.88 percent of the children in the control group. In the field of industry, 15.69 percent of the children in the experimental group compared to 4.17 percent of the children in the control group had found employment. A higher percentage of the children in the control group than in the experimental group were employed in home economics occupations; 13.54 and 2.94 respectively.

Table VII-112. Frequency of Children Twelve Years of Age or Older and Living at Home Who Were Employed in Various Fields of Employment by Treatment Group

Group	Field of Employment							
	Unemployed	Agriculture	Business	Industry	Home Economics	Health	Other	Chi Square
Experimental	48	28	3	16	3	1	4	19.93**
Control	46	21	9	4	13	0	3	

** Significant at the .01 level.

Occupational desires. Table VII-113 presents the data regarding the field of employment in which the children who were twelve years of age or older and living at home desired their lifetime career.

A total of 23.96 percent of the control group as compared to only 15.69 percent of the experimental group said they did not know what job they desired for a lifetime career. The greater amount of indecision observed by the control group could possibly be due to lack of vocational orientation which was received by the experimental group. A higher proportion of the experimental group children selected agriculture as their career field than did the control group children, 33.33 percent and 12.50 percent respectively.

Table VII-113. Frequency of Children Twelve Years of Age or Older Living at Home Who Desired Various Occupational Career Fields by Treatment Group

	Career Field							
Group	Do Not Know	Agriculture	Business	Industry	Home Economics	Health	Other	Chi Square
Experimental	16	32	11	17	4	3	19	14.96**
Control	23	12	14	21	9	5	12	

**Significant at the .01 level.

The data regarding the type of education children who were twelve years of age or older and living at home thought necessary for the job they desired for their lifetime occupation are presented in Table VII-114.

Table VII-114. Frequency of the Type of Education Children Twelve Years of Age or Older and Living at Home Thought Necessary for Job Desired for Lifetime Occupation by Treatment Group

	Type of Education						
Group	Do Not Know	Less than High School	Specialized Vocational Training	High School	2-year College	4-year College	Chi Square
Experimental	12	3	33	24	14	16	4.12
Control	11	8	26	18	17	16	

The chi square value was not significant at the .05 level. However a slightly higher percentage of the experimental group than the control group thought some type of education or training beyond high school was necessary for their lifetime occupation. These percentages were 85.29 and 80.20 respectively.

Cost of post-secondary education. Table VII-115 presents the data concerning the cost of one year of post-secondary education as estimated by children twelve years of age or older and living at home. The chi square value was significant at the .01 level, indicating that the estimated cost classification was a function of the treatment group.

Table VII-115. Frequency of the Estimated Cost of One Year of Post-Secondary Education by Children Twelve Years of Age or Older and Living at Home by Treatment Group

Group	Estimated Cost of Education $500 or less	$501-$1000	$1001-$2000	$2001 or More	Do Not Know	Chi Square
Experimental	14	25	19	6	38	24.06**
Control	12	6	8	4	66	

** Significant at the .01 level.

A higher percentage of the control group than the experimental group had no idea of the cost of one year of post-secondary education, 68.75 percent and 37.26 percent respectively. It was also noted that a greater proportion of the children in the experimental group than in the control group thought the cost classifications of $501 to $1000 and $1001 to $2000 would cover the cost of one year of post-secondary education. The respective percentages were 25.49 and 6.25 for the $501-$1000 classification and 18.63 and 8.33 for the $1001 to $2000 classification.

Employment location. Table VII-116 presents the data regarding the location children expect to find the job they want when they become adults.

Table VII-116. Frequency of the Location Children Twelve Years of Age or Older and Living at Home Desired for Lifetime Work by Treatment Group

Group	Location for Lifetime Work Rural Area or Small Town	City or Suburban	Do Not Know	Chi Square
Experimental	66	24	12	6.10*
Control	54	36	6	

*Significant at the .05 level.

A significant chi square value was observed indicating that the location of lifetime job with regard to rural and urban was a function of the treatment group. It was noted that a greater proportion of the experimental group children than the control group children desired to live in a rural or small town environment. These percentages were 64.71 and 56.25 respectively.

Children's desires. Tables VII-117 and VII-118 present the data concerning what children in the treatment groups who were twelve years of age or older and living at home wanted or desired more than anything else, and what they wanted their situation to be five years from the date of the posttest respectively. Neither of the chi square values for the two variables was significant. However, a greater proportion of the children in the experimental group than in the control group expressed desires and situations that were educationally oriented. The respective percentages were 25.49 and 17.71 for present wants and desires, and 23.53 and 15.63 for desired situation five years from time of the posttest.

Table VII-117. Frequency of the Responses to What Children Twelve Years of Age or Older and Living at Home Wanted or Desired More than Anything Else by Treatment Group

	Children's Wants and Desires					
Group	Occupationally Oriented	Educationally Oriented	Pleasure or Materialistically Oriented	Marriage or Family Oriented	Do Not Know	Chi Square
Experimental	36	26	17	11	12	9.12
Control	26	17	29	6	18	

Table VII-118. Frequency of the Responses to What Children Twelve Years of Age or Over and Living at Home Wanted Their Situation to be Five Years from Time of Posttest by Treatment Group

	Children's Wants					
Group	Occupationally Oriented	Educationally Oriented	Pleasure or Materialistically Oriented	Marriage or Family Oriented	Do Not Know	Chi Square
Experimental	46	24	9	18	5	9.07
Control	46	15	6	13	16	

Participation in school and community functions. Presented in Table VII-119 are data pertaining to the frequency of children's participation in school and community functions during the year prior to the posttest. The chi square value was not significant at the .05 level. The percentage of responses in each category was similar for the treatment groups, except for the "occasionally" category. A higher proportion of the experimental group than the control group occasionally participated in school and community functions. These percentages were 36.28 and 29.17 respectively.

Table VII-119. Frequency of the Participation of Children Twelve Years of Age or Over and Living at Home in School and Community Functions During the Year Preceding the Posttest by Treatment Group

Group	Frequency of Participation Never	 Rarely	 Occasionally	 Regularly	Chi Square
Experimental	21	14	37	30	1.27
Control	20	15	28	33	

Financial support for post-secondary education. The data concerning the source of financial support that children in the treatment groups who were twelve years of age or older and living at home felt would be available to them for post-secondary education are included in Tables VII-120 through VII-124. As shown in Table VII-120, the financial support that children who were twelve years of age or older and living at home thought would be available from their parents for their post-secondary education, was not a function of the treatment group as indicated by the non-significant chi square. Nearly equal proportions of the experimental and control groups children considered that their parents would supply at least some of their financial support for post-secondary education.

Presented in Table VII-121 are the data concerning financial support from self-employment children who were twelve years of age or older and living at home considered as being available for their post-secondary education. The chi square value was not significant. However, a higher percentage of the experimental group children than the control group children thought that self-employment would be a source of financial assistance for their post-secondary education. These percentages were 78.43 and 67.71 respectively

Table VII-120. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Their Parents a Source of Financial Support for Their Post-Secondary Educatinn by Treatment Group

Group	Financial Support from Parents No	 Yes	Adjusted Chi Square
Experimental	68	34	.00
Control	65	31	

Table VII-121. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Self-Employment as a Source of Financial Support for Post-Secondary Education by Treatment Group

Group	Financial Support from Self-Employment No	 Yes	Adjusted Chi Square
Experimental	22	80	2.38
Control	31	65	

Table VII-122 presents the data concerning the number of children twelve years of age or older and living at home who thought scholarships were a source of financial assistance for their post-secondary education. The chi square value was significant at the .01 level indicating that the financial support from scholarships classification was a function of the treatment group. A greater proportion of the experimental group children than the control group children considered scholarships to be a source of financial assistance for post-secondary education. Thus, experimental group children appeared to be more cognizant of scholarships as a possible source of financial assistance than did the control group children.

Table VII-122. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Scholarships as a Source of Financial Support for Post-Secondary Education by Treatment Group

Group	Financial Support from Scholarships No	 Yes	Adjusted Chi Square
Experimental	66	36	17.47**
Control	87	9	

**Significant at the .01 level.

Table VII-123 includes the data concerning the number of children twelve years of age or older and living at home who considered loans as a possible source of financial assistance for post-secondary education. The chi square value was not significant indicating that the classification of loans was not a function of the treatment group.

Included in Table VII-124 are the data regarding the children's knowledge of the source of all financial assistance for the post-secondary education they desired. The chi square value was significant at the .01 level. A higher percentage of the experimental group knew the source of their financial support for post-secondary education than did the control group; 93.14 percent and 79.17 percent respectively.

These data concerning the financial plans of children for post-secondary education indicate that the financial planning and educational goal establishment segments of the educational program were effective.

Table VII-123. Frequency of Children Twelve Years of Age or Older Living at Home Who Considered Loans as a Source of Financial Support for Post-Secondary Education by Treatment Group

	Financial Support from Loans		Adjusted
Group	No	Yes	Chi Square
Experimental	69	33	1.75
Control	74	22	

Table VII-124. Frequency of Children Twelve Years of Age and Older Living at Home Who Knew Where They Would Get Financial Support for Post-Secondary Education by Treatment Group

	Financial Support Known		Adjusted
Group	No	Yes	Chi Square
Experimental	7	95	8.20**
Control	20	76	

** Significant at the .01 level.

Level of income desired. Goal establishment was also involved in the establishment of an annual income level which children twelve years of age or older and living at home aspired to earn when they became adults. The data for these income aspirations are presented in Table VII-125.

Table VII-125. Frequency of the Level of Income Desired by Children Twelve Years of Age or Older Living at Home by Treatment Group

	Level of Income							
Group	$2000 or less	$2001-4000	$4001-6000	$6001-8000	$8001-10,000	$10,000 or More	Do Not Know	Chi Square
Experimental	1	9	23	24	21	16	8	31.76**
Control	7	9	14	10	10	13	33	

** Significant at the .01 level.

The chi square value observed was significant at the .01 level. In general, children of the experimental group desired a higher level of income than those of the control group. A total of 34.38 percent of the control group in comparison to only 7.84 percent of the experimental group indicated that they did not know what income they desired from their future job. It was noted that 0.98 percent of the experimental group children and 7.29 percent of the control group children aspired to earn less than $2000 annually.

Situations and Goals of Family

In order to evaluate the goal definition phase of the educational program to the situation and goals of families, an instrument was developed and employed to obtain the data reported in this section.

Family income. The education program in which the experimental families were involved included a unit of instruction of family income. Avenues of improving the family's income were explored, but the decision as to which alternative(s) would be adopted was left up to the families. Tables VII-126 through VII-131 include the status of change which families had made toward improving the family income during the year prior to the posttest.

Table VII-126 includes the data concerning the plans and changes made by families to expand and improve farming activities. The chi square value was not significant. It was noted that a higher percentage of the control group than the experimental group had either planned or changed their situation with regard to farming activities to improve the family income. These percentages were 33.33 and 19.15 respectively.

Table VII-126. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Expand or Improve Farming Activities to Increase Family Income by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	38	3	6	2.42
Control	34	5	12	

Table VII-127 presents the data regarding the plans and changes made by the families to get additional occupational training and/or to receive a job promotion. Although the chi square value was not significant, a higher percentage of the experimental group families had been able to obtain either occupational training or receive a job promotion than were the control group, 19.15 percent and 5.88 percent respectively.

Data regarding the plans or changes made by families to increase their income by having one or more additional family members obtain a job are included in Table VII-128. A significant chi square was observed which indicated that the status of additional members either planning or obtaining additional jobs was a function of the treatment group. Here a greater percentage of the experimental group families planned to have an additional member of the family obtain a job as well as a greater percentage of families that had an additional family member obtain a job. These percentages were 21.28 and 3.92 respectively for planning to have another member obtain a job, and 48.94 and 21.57 respectively for additional family members obtaining a job. Thus, 74.51 percent of the control group as compared to 29.79 percent of the experimental group had not planned to have an additional family member obtain a job or did not have any additional family members who had obtained a job. This could perhaps indicate that the experimental group, who received the vocationally oriented educational program, was aware of their economically disadvantaged condition, desired to change their situation, and saw the route of having additional family members seek jobs as one way of mitigating their situation.

Table VII-129 includes the data concerning the plans or changes made during the year preceeding the posttest by treatment group family members to change jobs in order to increase the family income. The chi square value was not significant. It was noted, however, that a higher percentage of the experimental group than the control group changed jobs, 21.28 and 5.88 respectively.

As presented in Table VII-130 the chi square value for the data regarding the number of families who had one or more family members who planned or actually obtained a second job to increase the family income was not significant. However, it was observed that a slightly higher percentage of the experimental group as compared to the control group had family members who obtained a second job. These percentages were 10.64 and 1.96 respectively.

Table VII-127. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Get Additional Occupational Training and/or Receive a Job Promotion to Increase Family Income by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	36	2	9	4.06
Control	46	2	3	

Table VII-128. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Have More Family Members Get a Job to Increase Family Income by Treatment Group

Group	Status of Change			Chi Square
	None	Planned	Changed	
Experimental	14	10	23	20.52**
Control	38	2	11	

** Significant at the .01 level.

Table VII-129. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Change Jobs to Increase Family Income by by Treatment Group

Group	Status of Change			Chi Square
	None	Planned	Changed	
Experimental	34	3	10	5.15
Control	45	3	3	

Table VII-130. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Have One or More Family Members Get a Second Job to Increase Family Income by Treatment Group

Group	Status of Change			Chi Square
	None	Planned	Changed	
Experimental	41	1	5	3,91
Control	47	3	1	

Table VII-131 includes the data regarding the number of families who planned to obtain more money from pensions or welfare sources and those who actually increased their family income through the acquisition of additional pension or welfare payments. The chi square value was not significant. More experimental families than control families, 10.64 percent as compared to 3.92 percent, increased their income by these means.

It was observed in summarizing the families' efforts to increase their incomes that a higher percentage of experimental families carried through with obtaining additional income from each alternative, except expanding and improving farm activities. The most popular source of additional income sought by the experimental group families was for additional family members to obtain a job.

Table VII-131. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Get More Money from Pensions or Welfare Sources to Increase Family Income by Treatment Group

Group	Status of Change			Chi Square
	None	Planned	Changed	
Experimental	40	1	6	4.09
Control	49	0	2	

Family expenditures. Budgeting and reducing family expenditures to enable families to meet established goals were topics included in the educational program. Thus, if the educational program was effective, the result would be an increase of budgeting and planning of expenditures by the families involved. The data in Tables VII-132 through VII-137 present evidences of change in families' pattern of expending money.

As shown in Table VII-132, a significant chi square value was obtained regarding the starting or expanding of the production of home raised products. For this variable, 72.55 percent of the control group as compared to 46.81 percent of the experimental group had neither changed nor planned to change their situation.

Table VII-133 includes the data concerning the development of a shopping list and shopping around for good buys in order to adjust the family's expenditures for food. The chi square value was significant at the .01 level. Deviations from expected values were observed in all classifications. A dramatic change toward developing shopping lists in order to shop around for good buys was noted in the experimental group as compared to the control group. The percentages were 61.70 and 21.57 respectively.

Data concerning responses to plans or changes made in keeping records of expenditures are presented in Table VII-134. A significant chi square value was observed. Approximately one-half (48.93 percent) of the experimental group in comparison to 15.69 percent of the control group indicated they had made changes or planned to make changes in their record keeping procedures.

As shown in Table VII-135, a signficant chi square value was observed for the variable of eliminating certain items of expense from the family budget. A total of 51.07 percent of the experimental group in comparison to 17.65 percent of the control group indicated that they had eliminated items of expenditure or that they had made plans to eliminate some expenditures.

Table VII-36 includes the data regarding change in the families' procedure with respect to budgeting the amount of money spent for certain items in order to adjust the family's expenditures. The chi square value was significant at the .05 level. It was noted that a higher proportion of the experimental group than the control group had changed or had made plans to change their procedures for budgeting the amount spent for certain items in order to reallocate the family budget to accomplish established goals. These percentages were 27.66 and 11.77 for the changed classification and 10.64 and 3.92 for the planned classifications.

The data regarding the plans and changes families made during the year prior to the posttest relating to doing without some items to adjust family income are presented in Table VII-137. The chi square value was significant at the .01 level. A greater percentage of the experimental group had planned to do without some items in order to adjust the family's expenditures as compared to the control group. The percentages of the treatment groups which had neither planned to do without certain items or actually had done without certain items were 14.89 for the experimental group and 86.28 for the control group.

Table VII-132. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Start or Expand Production of Home Raised Products to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	22	9	16	6.93*
Control	37	6	8	

* Significant at the .05 level.

Table VII-133. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Develop a Shopping List and Shop Around for Good Buys to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	8	7	32	34.91**
Control	40	0	11	

** Significant at the .01 level.

Table VII-134. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Keep Records of Expenditures to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	24	6	17	12.98**
Control	43	1	7	

** Significant at the .01 level.

Table VII-135. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Eliminate Certain Items of Expense to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	23	10	14	13.16**
Control	42	2	7	

** Significant at the .01 level.

Table VII-136. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest in Budgeting Amounts Spent for Certain Items to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	27	5	15	8.65*
Control	43	2	6	

* Significant at the .05 level.

Table VII-137. Frequency of Plans or Changes Families Made During the Year Prior to the Posttest to Do Without Some Items to Adjust Family Expenditures by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	7	9	31	49.97**
Control	44	2	5	

** Signficant at the .01 level.

Use of borrowed money. The wise use of borrowed money or credit for business purposes was one facet of family economic management with which the researchers felt disadvantaged families needed assistance. Thus, it was included in the educational program for which Tables VII-138 through VII-140 serve as an evaluation of the results by reflecting the use families made of credit.

The data regarding the use of borrowed money or credit for business purposes during the year prior to the posttest are included in Table VII-138. The chi square value was not significant at the .05 level. However, a greater proportion of the control group than the experimental group borrowed money or used credit for business purposes; 43.14 percent and 23.40 percent respectively.

The chi square contingency table for the use families made of borrowed money or credit for family living expenses for the year prior to the posttest is included in Table VII-139. The chi square value was not significant. A slightly higher percentage of the experimental group than the control group had borrowed money or used credit for family living expenses. These percentages were 44.68 and 31.37 respectively.

Included in Table VII-140 are the data regarding the use families made of borrowed money or credit for educational expenses during the year prior to the posttest. The chi square value was not significant. It was noted that 6.38 percent of the experimental group families and none of the control group families borrowed money for educational purposes.

Table VII-138. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Business Purposes by Treatment Group

Group	Used Borrowed Money or Credit		Adjusted Chi Square
	No	Yes	
Experimental	36	11	3.43
Control	29	22	

Table VII-139. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Family Living by Treatment Group

Group	Used Borrowed Money or Credit		Adjusted Chi Square
	No	Yes	
Experimental	26	21	1.32
Control	35	16	

Table VII-140. Frequency of the Use of Borrowed Money or Credit During the Year Prior to the Posttest for Educational Expenses by Treatment Group

Group	Used Borrowed Money or Credit		Adjusted Chi Square
	No	Yes	
Experimental	44	3	1.55
Control	51	0	

Use of public agencies. In preliminary findings, it was ascertained that disadvantaged rural families were isolationist, hence, they made very little if any use of the services of public agencies that were available in the community. Some of the agencies were designed specifically to help economically disadvantaged families. Tables VII-141 through VII-146 report the posttest results regarding the use families made of the various public agencies.

Table VII-141 includes the data regarding the use families made of the services provided by the University Extension Service. The chi square value was not significant. The University Extension Service was utilized by only a small protion of the experimental and control group families; 14.89 percent and 9.80 percent respectively.

Presented in Table VII-142 are the data concerning the use families made of the services provided by the local school. The chi square value was significant at the .01 level. A substantially higher proportion of the experimental group than the control group had obtained services from the local school during the year prior to the posttest; 93.62 percent as compared to 11.77 percent.

The use families made of the Soil Conservation Service and the County Health Service are reported in Tables VII-143 and VII-144 respectively. Neither chi square value was significant. Very little deviation from expected frequencies was observed for these two variables.

Included in Table VII-145 are the data regarding the number of families who received services from the Office of Economic Opportunities (OEO). The chi square value was significant indicating that the use of the OEO was a function of the treatment group. It was observed that 25.53 percent of the experimental group as compared to 0.00 percent of the control group made use of the OEO.

The chi square contingency table presenting the frequency of families who received services from the employment service during the year preceding the posttest is included in Table VII-146. The chi square value was significant at the .01 level. A greater percentage of the experimental group than the control group indicate that they had made use of the services provided by the employment office. These percentages were 19.15 and 1.96 respectively.

Table VII-141. Frequency of Families Who Received Service During the Year Prior to the Posttest from the University Extension Service by Treatment Group

Group	Used Services of University Extension Service		Adjusted Chi Square
	No	Yes	
Experimental	40	7	.55
Control	46	5	

Table VII-142. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Local School by Treatment Group

Group	Used Services of Local School		Adjusted Chi Square
	No	Yes	
Experimental	3	44	62.34**
Control	45	6	

**Significant at the .01 level.

Table VII-143. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Soil Conservation Service by Treatment Group

Group	Used Services of Soil Conservation Service		Adjusted Chi Square
	No	Yes	
Experimental	40	7	.03
Control	45	6	

Table VII-144. Frequency of Families Who Received Service During the Year Prior to the Posttest from the County Health Service by Treatment Group

Group	Used Services of County Health Service		Adjusted Chi Square
	No	Yes	
Experimental	38	9	.03
Control	43	8	

Table 145. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Office of Economic Opportunity by Treatment Group

Group	Used Services of the Office of Economic Opportunity No	 Yes	Adjusted Chi Square
Experimental	35	12	12.56**
Control	51	0	

** Significant at the .01 level.

Table 146. Frequency of Families Who Received Service During the Year Prior to the Posttest from the Employment Service by Treatment Group

Group	Used Services of the Employment Service No	 Yes	Adjusted Chi Square
Experimental	38	9	6.12*
Control	50	1	

*Significant at the .05 level.

A trend was observed for the experimental group as compared to the control group to use the services provided by public agencies included on the interview schedules as a means for upgrading the environmental conditions. Statistically significant changes were observed for the use of services provided by the school, Office of Economic Opportunity, and the employment service.

Farm Business Production Goals

Data pertaining to the farm business operated by families in the treatment groups are reported in this section. Tables VII-147 through VII-151 present the responses given by the families who operated a farm business concerning their production goals for various enterprises. The low number of families who had the various enterprises as a part of their farm business, thus resulting in low observed frequencies for many response classifications, precludes making conclusive statements regarding the effect of the educational program on the production goals of the farm business operators.

Included in Table VII-147 are the data for the production goals that farm business operators had established for their next crop of corn in bushels per acre. The yield goal classification was not a function of the treatment group as indicated by the non-significant chi square value obtained. It was observed that the experimental group farm operators, as compared to the control group, tended to have higher yield goals as exemplified by the fact that 33.33 percent of the experimental group as compared to 10.71 percent of the control group aspired to produce over 100 bushels of corn per acre.

Table VII-148 presents the data concerning the yield goals the farm business operators had established for their next crop of soybeans. The chi square value was not significant. However, when those responding who grew soybeans were considered, a trend for the experimental group to have a higher goal was observed. Of the farm business operators responding, 80.00 percent of the experimental group and 52.38 percent of the control group had yield goals that were over 26 bushels per acre.

Table VII-147. Frequency of Production Goal Levels for Per Acre Corn Yields Established by Farm Business Operators by Treatment Group

	Yield Goal				
Group	50 or Less	51-100	101-150	No Goal	Chi Square
Experimental	2	8	7	0	6.35
Control	4	16	3	3	

Table VII-148. Frequency of Production Goal Levels for Per Acre Soybean Yields Established by Farm Business Operators by Treatment Group

	Yield Goal				
Group	No Response	25 or Less	26-50	No Goal	Chi Square
Experimental	1	2	8	0	2.73
Control	1	8	11	2	

Presented in Table VII-149 are the data regarding the production goals of the farm business operator for the number of pigs to be weaned per litter. The chi square value was not significant. It was noted that none of the experimental group and one-sixth of the control group who raise pigs had no production goal.

The data regarding the production goals established by farm business operators for the number of calves weaned per cow per year are presented in Table VII-150. The chi square value was not significant. The deviation from expected values was small for each production goal classification.

Table VII-151 includes the data regarding the production goals for lambs weaned per ewe per year that were established by farm business operators. The chi square value was not significant. Too few farm business operators raised lambs to make a statement of trend. It was noted however, that all farm business operators (two) in the control group that raised lambs had a production goal of one lamb weaned per ewe per year while all (three) farm business operators in the experimental group had a production goal of more than one but less than two lambs weaned per year.

Table VII-149. Frequency of Production Goal Levels for Number of Pigs Weaned Per Litter Per Year Established by Farm Business Operators by Treatment Group

	Production Goal			
Group	6-7	8-9	10-11	Chi Square
Experimental	1	14	2	3.14
Control	1	12	2	

Table VII-150. Frequency of Production Goal Levels for Number of Calves Weaned Per Cow Per Year Established by Farm Business Operators by Treatment Group

	Productinn Goal			
Group	Less than One	One	No Goal	Chi Square
Experimental	2	10	1	1.59
Control	4	11	0	

Table VII-151. Frequency of Production Goal Levels for Lambs Weaned Per Ewe Per Year Established by Farm Business Operators by Treatment Group

	Production Goal		
Group	One	More than One but Less than Two	Chi Square
Experimental	0	3	1.70
Control	2	0	

The Home and Its Surroundings

Data concerning the changes families made or planned to make to improve their living environment are included in this section.

Postulated on the theory that improvement of family morale and adjustment in the family expenditures at the same time would result in an increase of pride of ownership and desire for a better mode of living, the researchers hypothesized that the families in the experimental group would try to improve their environmental situation.

Table VII-152 includes the data regarding the number of families who changed their place of residence to a larger or better facility. The chi square value was not significant. It was noted, however, that 12.77 percent of the experimental group as compared to 5.77 percent of the control group changed their place of residence in order to change their environment.

A less drastic method of changing the environmental conditions with relation to the improvement of the housing situation was to remodel or repair the structure in which the families resided. The data concerning the repairing or remodeling of the residence, included in Table VII-153, shows that the status of change classification was a function of the treatment group. The chi square value was significant at the .01 level. It was noted that 38.30 percent of the experimental group as compared to 9.62 percent of the control group had repaired or remodeled at least some part of their residence.

Table VII-152. Frequency of Changes Made or Planned to Improve the Living Environment by Renting or Buying a Better Or larger House During the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	39	2	6	1.50
Control	47	2	3	

Table VII-153. Frequency of Changes Made or Planned to Improve the Living Environment by Repairing or Remodeling the House During the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	24	5	18	11.78**
Control	36	11	5	

** Significant at the .01 level.

Included in Table VII-154 are the data related to the obtaining of better furniture to improve the living environment of the treatment group families. The chi square value obtained was significant at the .01 level. A higher percentage of the experimental group families than the control group families had obtained some additional furniture during the year prior to the posttest. These percentages were 36.18 and 17.31 respectively.

As shown in Table VII-155, the chi square value for the data concerning the status of change related to obtaining a better water supply to improve the environmental quality was not significant. It was noted that 14.89 percent of the experimental families as compared to 5.77 percent of the control group had made definite changes to improve the water supply for home use.

As shown in Table VII-156, the environmental change of obtaining electricity for the home was made by only one family, a member of the experimental group, during the year prior to the posttest, thus precluding the making of conclusive statements. It was found that most of the families did have electricity in their home although adequate wiring may have been absent.

Table VII-154. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining More and Better Furniture During the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	18	17	17	12.23**
Control	38	5	9	

** Significant at the .01 level.

Table VII-155. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining a Better Water Supply During the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	38	2	7	2.85
Control	48	1	3	

Table VII-156. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining Electricity for the Home During the Year Prior to the Posttest by Treatment Group

Group	Status of Change None	Changed	Chi Square
Experimental	46	1	1.12
Control	52	0	

Included in Table VII-157 are the data regarding the number of families who obtained a telephone in order to improve their environmental conditions. The chi square value was not significant. Four families (8.51 percent) in the experimental group and one family (1.92 percent) in the control group had installed a telephone in their homes during the year prior to the posttest.

Table VII-157. Frequency of Changes Made or Planned to Improve the Living Environment by Obtaining a Telephone During the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	41	2	4	2.26
Control	49	2	1	

Observations made by the research staff indicated that the yard and surroundings of disadvantaged families were usually in disarray. Thus, a change toward having a neat orderly yard and surroundings was considered to be a change toward reentering the mainstream of community life. The data concerning the number of families who made some change in their yard and surroundings are included in Table VII-158. The chi square value, which was significant at the .01 level, indicated that the status of change concerning the improvement of the yard and surroundings was a function of the treatment group. A greater percentage of the experimental group families than the control group families had made improvements in their yards and surroundings during the year prior to the posttest. These percentages were 53.19 and 23.08 respectively.

Table VII-158. Frequency of Changes Made or Planned to Improve the Living Environment by Improving the Condition of the Yard and Surroundings during the Year Prior to the Posttest by Treatment Group

	Status of Change			
Group	None	Planned	Changed	Chi Square
Experimental	19	3	25	9.58**
Control	35	5	12	

** Significant at the .01 level.

Morale

The Minnesota Survey of Opinion (MSO) (5) was employed to obtain a pretest and posttest measure of two morale variables, general adjustment and total morale. Table VII-159 presents the analysis of covariance summary table for the MSO total morale score. The pretest scores served as the covariate for the corresponding posttest scores, the variate. The main effect due to treatment was significant at the .05 level. The group participating in the vocationally oriented educational program exhibited a higher morale as measured by the Minnesota Survey of Opinion than did the control group. This was indicated by the total morale adjusted mean of 53.70 for the experimental group as compared to an adjusted mean score of 58.13 for the control group with the lower score indicating a higher morale.

The means for the replications, matched pairs of communities, did not prove to be significantly different. Neither was the interaction between treatment and replication found to be significant.

Table VII-159. Analysis of Covariance Summary Table for MSO Total Morale Score

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	478.750	5.464*
B (Replications)	4	199.923	2.282
A X B (Treatment X Replications)	4	182.218	2.080
Error	87	87.621	
Total	96		

* Significant at the .05 level

Table VII-160 includes the analysis of covariance of the MSO General Adjustment posttest data using the pretest score of each family as the covariate and the corresponding posttest score as the variate. The treatment main effect was significant at the .01 level. The adjusted treatment means for the experimental and control groups were 38.78 and 48.20 respectively with the lower score indicating a better adjustment. Hence, the experimental group exhibited the better general adjustment.

The design included five replications of the treatment, thus, a treatment main effect, a replications main effect, and an interaction were obtained. Significant F ratios were not obtained for either the main effect due to replications or the interaction between the treatment and the replications.

Table VII-160. Analysis of Covariance Summary Table for MSO General Adjustment Scores

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
Treatment	1	752.085	18.839**
Replications	4	69.6538	1.743
Treatment X Replications	4	48.548	1.216
Error	87	39.921	
Total	96		

** Significant at the .01 level

Leisure Time

Your Leisure Time Activities, an instrument developed by Pace (5), was employed as a pretest and posttest measure of the leisure time participation and amount of enjoyment derived from the participation in leisure time activities. The leisure time enjoyment score and leisure time participation score reflect the participation in and enjoyment from leisure time derived by the adult family members.

The analysis of covariance for Leisure Time Participation is presented in Table VII-161. The main effect of the treatment was significant at the .01 level. The experimental group adjusted treatment mean was significantly higher than the control group adjusted treatment mean. These means were 100.93 and 91.05 respectively with the higher score indicating greater leisure time participation.

Table VII-161. Analysis of Covariance Summary Table for Leisure Time Participation Scale of Your Leisure Time Activities

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	2296.254	8.588**
B (Replication)	4	638.551	2.388
A x B (Treatment x Replication)	4	781.222	2.922*
Error (within cell)	87	267.3918	
Total	96		

* Significant at the .05 level
** Significant at the .01 level

A significant interaction effect, between treatment group and replication was obtained. Thus, the results of the test on the main effect cannot be considered conclusive. The Newman-Keuls (7) procedure was employed to determine which pairs of adjusted community means were significantly different at the .05 level. The adjusted community means with a notation of significant pairs of means are included in Table VII-162. Here the community in the experimental group and replication 1 is denoted as community 11. In the table these notations appear in parentheses below the adjusted mean. It was noted that two of the adjusted community means for the experimental group were significantly higher than one of the control group adjusted community means. One experimental group adjusted mean was significantly higher than two of the control group adjusted means.

Table VII-162. Adjusted Community Leisure Time Participation Means for the Replications of Experimental and Control Groups with Significant Pairs of Means Indicated for the .05 Level

	Treatment Group	
Replication	Experimental (1)	Control (2)
1	93.65	97.06
2	105.72 (24)*	103.25
3	94.39	87.19
4	110.03 (24,25)	81.01 (12,14,15)
5	104.50 (24)	82.47 (14)

*Denotes that mean 12 is significantly different at the .05 level from mean 24

Thus, the experimental treatment had a differential effect on the Leisure Time Participation in the treatment groups as indicated by the non-additivity of the main effects.

The analysis of covariance for Leisure Time enjoyment is presented in Table VII-163. The treatment main effect was significant at the .01 level. The group involved in the educational program had an adjusted mean treatment score of 90.04, which was significantly higher than the adjusted treatment mean of 75.39 for the control group. A higher score is indicative of greater leisure time enjoyment. Because of the significant interaction effect, it cannot be concluded that treatment had the same effect in all communities. Table VII-164 presents the adjusted community means for Leisure Time Enjoyment and includes the notation for significant pairs of adjusted means at the .05 level in parentheses below each mean. The Newman-Keuls procedure was employed to ascertain which pairs of adjusted means were significantly different. It was noted that three of the experimental group adjusted community means were significantly higher than two or more control group adjusted community means. None of the control group adjusted community means were significantly higher than the experimental group adjusted community means.

Table VII-163. Analysis of Covariance Summary Table for the Leisure Time Enjoyment Scale of Your Leisure Time

Source of Variance	Degree of Freedom	Mean Squares	F Ratio
A (Treatment)	1	5136.352	13.005**
B (Replication)	4	305.207	.773
A x B (Treatment x Replication)	4	2919.691	7.393**
Error (Within Cell)	87	394.934	
Total	96		

** Significant at the .01 level

Table VII-164. Adjusted Community Leisure Time Enjoyment Means for the Replications of Experimental and Control Groups with Significant Pairs of Means Indicated

	Treatment Group	
Replication	Experimental (1)	Control (2)
1	83.60	87.80 (24,24)*
2	80.78	90.32 (24,25)
3	87.27 (24,25)	74.03 (14)
4	103.07 (23,24,25)	59.95 (13,14,15,21,22)
5	101.40 (24,25)	58.86 (13,14,15,21,22)

* Denotes that this mean is significantly different at the .05 level from means 24 and 25

Community Social Behavior

The Community Solidarity Index Schedule by Fessler (3) was employed to obtain an index of the participants' opinions about the quality of the community. The nine measures of community solidarity included the attitude toward community spirit, interpersonal relations, family responsibility toward the community, schools, churches, economic behavior, local government, and tension areas. Analysis of covariance was employed to analyze the data. The pretest score for each individual on each scale was the covariate for the corresponding score on the posttest, the variate. The Newman-Keuls procedure was employed to probe significant interaction effects. Significant main effects due to replications were not probed since differences among the replications were not relevant to the researchers' hypothesis that the treatment would significantly change the behavior of the participants in the educational program.

Table VII-165 includes the analysis of covariance summary for scores that represented community spirit as measured by the Community Solidarity Index Schedule. The treatment main effect was not significant. Hence, adjusted treatment means for the group participating in the vocationally oriented educational program and the control group did not differ significantly in the level of community spirit. The main effect for replications was significant at the .05 levels indicating that a significant difference exists among the adjusted replication means.

Table VII-165. Analysis of Covariance Summary for the Community Spirit Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	1.468	0.243
B (Replication)	4	19.090	2.656*
A x B (Treatment x Replication)	4	8.006	1.114
Error (within cell)	87	7.186	
Total	96		

* Significant at the .05 level

The analysis of covariance for the interpersonal relations scale as measured by the Community Solidarity Index Schedule is presented in Table VII-166. The main effect due to treatment was not significant at the .05 level. Hence, no significant difference existed in the adjusted means for community interpersonal relations between the group that participated in the vocationally oriented educational program and the control group. However, significant main effect due to replications was obtained. The interaction between treatment and replications was also significant. Meaningful relationships did not emerge from the post hoc probe using the Newman-Keuls method. Two experimental communities had the highest adjusted means while two other experimental communities had the lowest adjusted means. One experimental community adjusted mean was significantly higher at the .05 level than three other experimental community adjusted means and all control community adjusted means.

Table VII-166. Analysis of Covariance Summary for the Interpersonal Relations Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	9.247	1.381
B (Replication)	4	23.773	3.550**
A x B (Treatment x Replication)	4	22.586	3.373*
Error (within cell)	87	6.697	
Total	96		

* Significant at the .05 level
** Significant at the .01 level

Table VII-167 includes the analysis of covariance summary for scores that represented family responsibility toward the community as measured by the Community Solidarity Index Schedule. The treatment main effect and the main effect due to replication were not significant. The interaction between treatment and replications was significant. The Newman-Keuls procedure did not reveal a meaningful trend.

Table VII-167. Analysis of Covariance Summary for the Family Responsibility Toward Community Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	26.789	3.314
B (Replication)	4	14.370	1.778
A x B (Treatment x Replication)	4	22.130	2.738*
Error (within cell)	87	8.084	
Total	96		

* Significant at the .05 level

The analysis of covariance for scores that represented community behavior pertaining to schools as measured by the Community Solidarity Index Schedule is presented in Table VII-168. The treatment main effect was significant at the .05 level. The group involved in the educational program had an adjusted mean treatment score of 18.00 which was significantly higher than the adjusted treatment mean of 16.77 for the control group. The higher score indicated that the treatment group was significantly better satisfied with the community schools than was the control group. However, due to the significant interaction effect, it cannot be concluded that the treatment had the same effect in all communities. Table VII-169 presents the adjusted community means for community behavior regarding schools and includes the notation for significant pairs of means at the .05 level in the parentheses below the mean. The Newman-Keuls procedure revealed that one of the experimental group adjusted means was significantly higher at the .05 level than one control group community adjusted mean. One pair of experimental group adjusted treatment means was also significantly different at the .05 level.

Table VII-168. Analysis of Covariance Summary for the Community Behavior Pertaining to Schools Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	35.082	6.049*
B (Replication)	4	7.148	1.233
A x B (Treatment x Replication)	4	17.293	2.982*
Error (within cell)	87	5.800	
Total	96		

* Significant at the .05 level

Table VII-169. Adjusted Means for Community Solidarity Index Schedule for the Replications of Experimental and Control Groups with Significant Pairs of Means for the .05 level

Replication	Treatment Group Experimental (1)	Control (2)
1	15.98 (13) *	16.53
2	18.29	17.48
3	19.61 (11,23)	15.27 (13)
4	18.27	16.94
5	17.61	17.43

*Denotes that the adjusted mean for group one, replication one is significantly different at the .05 level from the adjusted mean for group one, replication three.

The analysis of covariance summary for scores that represented community behavior pertaining to churches as measured by Community Solidarity Index Schedule is presented in Table VII-170. The main effect due to treatment and the replication main effect were not significant. There was a significant interaction between treatment and replication. No pairs of adjusted community means were found to be significantly different when the Newman-Keuls procedure was followed.

Table VII-170. Analysis of Covariance Summary for the Community Behavior Pertaining to Churches Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	3.362	0.352
B (Replication)	4	16.345	1.713
A x B (Treatment x Replication)	4	25.416	2.664*
Error (within cell)	87		
Total	96		

* Significant at the .05 level

The analysis of covariance summary for scores that represented community economic behavior as measured by the Community Solidarity Index Schedule (3) is presented in Table VII-171. The treatment main effect was not significant at the .05 level. Thus, there was no significant difference between the experimental group and the control group regarding community economic behavior. A significant difference was found for the main effect due to replications indicating that a significant difference existed among the adjusted replication means.

Table VII-171. Analysis of Covariance Summary for the Economic Behavior Scale of the Community Solidarity Index Schedule

Source of Variation	Degrees Freedom	Mean Squares	F Ratio
A (Treatment)	1	16.164	1.903
B (Replication)	4	28.924	3.406*
A x B (Treatment x Replication)	4	10.941	1.288
Error (within cell)	87	8.493	
Total	96		

* Significant at the .05 level

The analysis of covariance summary for the scores that represented community behavior pertaining to local government as measured by the Community Solidarity Index Schedule is shown in Table VII-172. The main effect of the treatment was significant at the .05 level. The control group adjusted treatment mean was significantly higher than the experimental group adjusted treatment mean; these means were 15.23 and 13.30 respectively with the higher score indicating greater satisfaction with the local government. However, it should be noted that a significant interaction effect was found between treatment group and replication. Newman-Keuls procedure was employed to determine which pairs of adjusted community means were significantly different. The adjusted community means with a notation indicating significant pairs of means are included in Table VII-173. The adjusted mean for one experimental group community was significantly lower (at the .05 level) than the adjusted means for another experimental group community and one control community.

Table VII-174 includes the analysis of covariance summary for scores that represented community tension as measured by the Community Solidarity Index Schedule. The treatment main effect and the main effect due to replication were not significant. However, the interaction between treatment and replication was found to be significantly different at the .01 level. The Newman-Keuls procedure, which revealed that one experimental group adjusted community mean was significantly different at the .05 level from two other experimental group adjusted community means, did not yield meaningful patterns.

Table VII-172. Analysis of Covariance Summary Table for the Community Behavior Pertaining to Local Government Scale of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	67.026	6.594*
B (Replication)	4	21.885	2.153
A x B (Treatment x Replication)	4	34.345	3.3791*
Error (within cell)	87	10.164	
Total	96		

*Significant at the .05 level

Table VII-173. Adjusted Means for Community Behavior Pertaining to Local Government as Measured by the Community Solidarity Index Schedule with Significant Pairs of Means Indicated for the .05 level

	Treatment Group	
Replication	Experimental (1)	Control (2)
1	12.17	16.35 (12)*
2	11.09 (13,21)	15.12
3	16.87 (12)	14.60
4	13.71	14.49
5	12.69	15.47

* Denotes adjusted community mean 21 is significantly different from adjusted community mean 12.

Table VII-174. Analysis of Covariance Summary for the Community Tension Scale of the Community Solidarity Index Schedule.

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	1.411	0.276
B (Replication)	4	6.959	1.360
A x B (Treatment x Replication)	4	20.450	3.995**
Error (within cell)	87	5.119	
Total	96		

** Significant at the .01 level

When the total Community Solidarity Index Schedule score was analyzed using the analysis of covariance technique, no significant difference was found between the group that received the vocationally oriented educational program and the control group as shown in Table VII-175. The F ratio obtained for main effect due to replications was not significant. The interaction between treatment and replications was significant at the .05 level. Results of the probe of the interaction were inconclusive. One experimental community adjusted mean was significantly different at the .05 level from another experimental community adjusted mean.

Table VII-175. Analysis of Covariance Summary of the Total Score of the Community Solidarity Index Schedule

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
A (Treatment)	1	161.293	0.5073
B (Replication)	4	585.875	1.843
A x B (Treatment x Replication)	4	1124.939	3.539*
Error (within cell)	87	317.944	
Total	96		

* Significant at the .05 level

Summary of community solidarity data. The results from the data concerning the community solidarity are inconclusive. Trends could not be identified when the adjusted treatment means in Table VII-176 were inspected. The treatment main effects were significant for two of the nine scales. The experimental group had a significantly better attitude toward the schools, however, the control group had a significantly better attitude toward the local government. The researchers were encouraged by the fact that the adjusted total score, a score representing a total of all scales, was slightly higher, although not significantly higher, than the control group. However, the differences observed on most scales as indicated by the non-significant F ratios were due to chance.

Table VII-176. Adjusted Treatment Means for Community Solidarity Index Schedule Scales

	Treatment Group	
Variable	Experimental	Control
Community Spirit	16.84	17.08
Interpersonal Relations	17.74	17.13
Family Responsibility Toward Community	15.65	16.81
Schools	18.00	16.77
Churches	16.28	15.89
Economic Behavior	15.72	16.61
Local Government	13.30	15.23
Community Tension	16.87	17.11
Total	132.70	130.15

Perceived Social Class of Families

The Sims SCI Occupational Rating Scale (6) was employed to ascertain a pretest and posttest measure of the families' perceived social class. The analysis of covariance summary for the perceived social class variable is presented in Table VII-177. The main effect for treatment was not significant at the .05 level. Therefore, there was no significant difference in social class identification between the group that received the educational treatment and the control group that received no treatment. The adjusted treatment mean for the experimental group was slightly higher than the control group adjusted mean indicating that a trend may exist for the families who were involved in the educational program to consider themselves to be in a higher social class. The adjusted means were 12.44 and 11.03 respectively. The significant differences that existed among the replication means was not relevant to the researchers' hypothesis that there would be a significant treatment effect. Thus, the Newman-Keuls technique was not employed to ascertain the significant pairs of replication means.

Table VII-177. Analysis of Covariance Summary Table for the Social Class Index Score

Source of Variance	Degree of Freedom	Mean Squares	F Ratio
A (Treatment)	1	46.217	1.938
B (Replication)	4	65.199	2.734*
A x B (Treatment x Replication)	4	38.004	1.593
Error (within cell)	87	23.852	
Total	96		

*Significant at the .05 level

Deprivation

A measure of deprivation was obtained for the eleven scales and a total score by employing the McVoy's Wants and Satisfaction Scale (5) as a pretest and posttest measure. The eleven deprivation scales are house and yard, household conveniences, food, clothing, education, health, recreation, social participation, working conditions, transportation, and security. A high score on the deprivation scales is indicative of a feeling of not having wants and desires satisfied.

Table VII-178 includes the analysis of covariance summaries for the eleven scales and the total deprivation score. The treatment main effect was not significant for any of the scales or the total score. Thus, the feeling of deprivation neither increased nor decreased significantly due to the involvement in the educational program.

Significant main effects due to replications were obtained for the variables of house and yard, food, clothing, education, health, recreation, social participation, transportation, and the total deprivation score. The specific replications, pairs of communities which were significantly different, did not have any relation to the effect that the treatment had on the communities, thus, the Newman-Keuls procedure was not employed when significant replication main effects were observed.

The Newman-Keuls procedure was employed to ascertain which of the adjusted community means were significant when significant interaction effects were obtained. Significant interactions were obtained for the deprivation scales of food, education, recreation, social participation and work conditions. Meaningful patterns of significant pairs of adjusted means could not be identified. Pairs of adjusted community means that were the most order steps apart, the highest and the lowest, were in the same treatment group for all significant interactions. Thus, the treatment appeared to have a differential effect depending upon the community. Experimental group adjusted community means were the highest and lowest for the variables of food, education, recreation and social participation.

Table VII-178. Analysis of Covariance Summaries for Deprivation Variables Measured by the Wants and Satisfaction Scale

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
	Scale 1 - House and Yard		
A (Treatment)	1	0.176	0.018
B (Replication)	4	61.568	6.225**
A x B (Treatment x Replication)	4	12.305	1.244
Error (within cell)	87	9.904	
	Scale 2 - Food		
A (Treatment)	1	2.244	0.432
B (Replicatinn)	4	17.222	3.311*
A x B (Treatment x Replication)	4	13.301	2.557*
Error (within cell)	87	5.201	

Table VII-178 (Continued)

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
	Scale 3 - Clothing		
A (Treatment)	1	0.305	0.541
B (Replication)	4	2.207	3.906**
A x B (Treatment x Replication)	4	0.492	0.871
Error (within cell)	87	0.565	
	Scale 4 - Education		
A (Treatment)	1	7.1030	1.700
B (Replication)	4	40.060	9.587**
A x B (Treatment x Replication)	4	22.317	5.341**
Error (within cell)	87	4.179	
	Scale 5 - Health		
A (Treatment)	1	0.602	0.137
B (Replication)	4	19.948	4.537**
A x B (Treatment x Replication)	4	6.378	1.451
Error (within cell)	87	4.396	
	Scale 6 - Recreation		
A (Treatment)	1	1.248	0.180
B (Replication)	4	18.495	2.663*
A x B (Treatment x Replication)	4	20.360	2.932*
Error (within cell)	87	6.945	
	Scale 7 - Social Participation		
A (Treatment)	1	3.073	0.767
B (Replication)	4	17.380	4.340**
A x B (Treatment x Replication)	4	16.319	4.075**
Error (within cell)	87	4.005	

Table VII-178 (Continued)

Source of Variance	Degrees of Freedom	Mean Squares	F Ratio
Scale 8 - Work Conditions			
A (Treatment)	1	0.106	0.246
B (Replication)	4	0.199	0.462
A x B (Treatment x Replication)	4	1.853	4.310
Error (within cell)	87	0.430	
Scale 9 - Transportation			
A (Treatment)	1	0.002	0.007
B (Replication)	4	0.929	2.705*
A x B (Treatment x Replication)	4	0.382	1.112
Error (within cell)	87	0.343	
Scale 10 - Household Conveniences			
A (Treatment)	1	5.814	0.850
B (Replication)	4	11.833	1.730
A x B (Treatment x Replication)	4	7.274	1.063
Error (within cell)	87	6.842	
Scale 11 - Security			
A (Treatment)	1	11.118	1.981
B (Replication)	4	12.178	2.170
A x B (Treatment x Replication)	4	5.418	0.966
Error (within cell)	87	5.611	
Scale 12 - Total			
A (Treatment)	1	42.727	0.224
B (Replication)	4	1082.419	5.666**
A x B (Treatment x Replication)	4	362.103	1.895
Error (within cell)	87	191.085	

*Significant at the .05 level
**Significant at the .01 level

Summary of deprivation data. The effect the educational program would have on the feelings of disadvantaged families regarding their deprivation was difficult for the researchers to anticipate. On the one hand it was hoped that the families would feel less deprived while on the other hand it was theorized that unless the families became unhappy with their deprived situation, they would do nothing to improve their situation.

As shown in Table VII-179 the trend appeared to be for the experimental group adjusted treatment means to indicate that the experimental families felt a higher degree of deprivation than the control families. Here a higher score indicates greater deprivation. As reported earlier, the experimental families had made significant changes in their environmental situation by buying furniture and improving their house and its surroundings. The adjusted mean deprivation score on the house and yard scale of the Wants and Satisfaction Scale was slightly higher for the experimental group than the control group. Thus, the theory that changing the environmental situation is dependent upon increasing the feeling of deprivation appears to have some basis.

Table VII-179. Adjusted Treatment Means for Wants and Satisfaction Deprivation Scale

	Treatment Group	
Variable	Experimental	Control
House and Yard	8.94	7.02
Food	2.09	1.79
Clothing	0.66	.77
Education	4.09	3.54
Health	2.79	2.63
Recreation	6.29	6.06
Social Participation	2.68	2.29
Work Conditions	.35	.42
Automobile	.61	.62
Household Conveniences	4.53	5.02
Security	6.34	5.67
Total Deprivation	37.86	36.52

School Data

School data consisting of overall grade point average, vocational and practical arts grade point average, and attendance were collected and analyzed for each student who was twelve years of age or older whose family participated in the educational program. The pretest score was the children's grades and attendance for the year prior to the beginning of the educational program. The posttest was the grades and attendance for the year during the educational program.

Table VII-180 presents the analysis of covariance summaries for two-way analysis of covariance of school posttest data using the pretest data of each student as the covariate for the corresponding posttest score, the variate. The treatment main effect was not significant for overall grade point average, vocational grade point average, or attendance. Overall grade point average and vocational grade point average were based upon a scale of A+ = 13, A = 12, A- = 11, B+ = 10, B = 9, B- = 8, C+ = 7, C = 6, C- = 5, D+ = 4, D = 3, D- = 2, and F = 1. The measure of attendance was the total number of days students were absent from school during the year.

As shown in Table VII-180, the main effect due to replications and the interaction of treatment and replications were significant at the .05 level and .01 level respectively for the overall grade point average variable.

Table VII-180. Analysis of Covariance Summaries for School Data for Children Twelve Years of Age or Older

Source of Variation	Degrees of Freedom	Mean Squares	F Ratio
Overall Grades			
A (Treatment)	1	.060	.026
B (Replication)	4	7.044	3.021*
A x B (Treatment x Replication)	4	8.336	3.574**
Error (within cell)	161	2.328	
Vocational Grades			
A (Treatment)	1	2.177	.608
B (Replication)	4	1.830	.511
A x B (Treatment x Replications)			
Error (within cell)	51	3.583	
Attendance			
A (Treatment)	1	68.465	1.317
B (Replication)	4	100.591	1.935
A x B (Treatment x Replications)	4	112.782	2.170
Error (within cell)	164	51.981	

* Significant at the .05 level

** Significant at the .01 level

Investigation of the cell means, the mean for the communities, showed that one experimental community had the highest adjusted mean for overall grade point average while another experimental community had the lowest adjusted mean for overall grades; 6.58 and 4.62 respectively. One experimental community was found to have an adjusted mean overall grade point average that was significantly different from one experimental community and two control community adjusted means when the Newman-Keuls technique was applied. Thus, it appears that the treatment effect was confounded with the community effect, the replications.

As shown in Table VII-181, the experimental group as compared with the control group, had the higher adjusted vocational grade point average, but had lower adjusted overall grade point average and the poorer attendance.

Table VII-181. Adjusted Means for School Data for Children Twelve Years of Age or Older by Treatment Group

	Treatment Group	
Variable	Experimental	Control
Overall grades	5.79	5.90
Vocational grades	7.40	7.20
Attendance	10.12	8.27

SUMMARY AND CONCLUSIONS

This section presents a summary of the procedure, describes the degree of similarity of the research treatment samples, reports the findings and presents conclusions that the authors made from the research findings.

Summary

The primary purpose of this phase of the research was to evaluate generalizability of a vocationally oriented educational program designed to bring about the utilization of the capabilities of disadvantaged rural youth which could enable them to prepare themselves for gainful employment. In order to accomplish this task it was thought necessary to bring the entire rural disadvantaged family back into the mainstream of community life by effecting change in their attitudes toward their situation and their community. The model vocationally oriented education program which was tried out in an earlier phase of the research in a single community was implemented in five communities.

Selection of the Sample

The population consisted of economically and socially disadvantaged rural families in ten communities selected from those identified as being economically depressed. The criteria for inclusion were: (1) the families have an annual income of $3000 or less or equivalent for a larger family or (2) the families are considered to be disadvantaged by officials in one or more community agencies. The population was also delimited by eliminating those families which did not have children of school or preschool age. A random sample of 10 or more families was drawn from the delimited population in each of the ten research communities.

Treatment

The model vocationally oriented educational program served as the treatment for the families in the experimental communities. The educational program focused on three topics: (1) youth and their career choices, (2) family financial management, and (3) improvement of family income.

Data Collected

Anthropological, sociological, and psychological data were collected by employing selected standardized instruments, a Family Data Record, school data form, and a series of interview schedules. The Family Data Record was employed for the pretest to ascertain the environmental conditions of the families. The school data form, interview schedules and standardized instruments were administered as pretest and posttest measures.

Statistical Design and Analysis

The research design employed was a pretest-posttest control group design with five replications. Ten communities selected to participate in the study were paired on a priori decision based on community census data. One community of each matched pair was randomly assigned to the experimental group.

Chi square analysis was employed both to establish the similarities of the treatment group samples on the basis of the pretest and to ascertain the effectiveness of the educational program on the basis of the posttest data. Analysis of variance was also employed to describe and compare the treatment group samples on the basis of the pretest. Analysis of covariance was employed to analyze interval data where a pretest and posttest measure was obtained. Each pretest score served as the covariate for the corresponding posttest score, the variate. The Newman-Keuls procedure was employed to test the significance between community means when significant interactions were obtained.

Results and Discussion

A summary and discussion of the results concerning the description of the sample selected and the effect of the experimental treatment on the various anthropological, sociological, and psychological data collected as pretest and posttest measures are presented in this section.

Descriptions of the Research Sample

The similarity of the research sample was established by examining the data collected as a pretest measure pertaining to the anthropological, sociological and psychological conditions of the families in the treatment groups. The Family Data Record and the Interview Schedules were the instruments used to obtain the data.

Family residence. Families in the experimental and control groups had similar environmental conditions with regard to the family residence. In general the families lived in a single occupancy residence of poor or fair condition which they owned or rented. Most of the families had electricity in the home but many did not have the household conveniences, such as a telephone and indoor bathroom. The resale value the families placed on their residences was generally less than $10,000. The control group evaluated their residences higher than the experimental group. However, the interviewers' evaluation, which indicated that a higher percentage of the control group than the experimental group residences were in poor or fair condition, did not reflect this higher evaluation.

Farm business. The improvement of the management of the farm businesses was considered by the researchers to be a possible avenue for increasing disadvantaged families' expendable income since approximately three-fifths of the disadvantaged rural families included in this phase of the study operated some type of farm business from which approximately one-fourth received one-half or more of their family income. A majority of the farm businesses were operated on less than 80 acres. Of the farm businesses, approximately three-fourths included some type of livestock, nearly one-fourth included vegetables for family consumption, and approximately one-third included field crops.

The treatment groups were similar for all variables related to the farm business except the presence or absence of a crop enterprise in the farm business. A greater percentage of the experimental group had crops as part of their farm business operation.

Financial assistance. A knowledge of the financial assistance that the disadvantaged families were receiving from sources outside of the family was considered to be a prerequisite for the local coordinator of the education program to assist the families in establishing realistic goals. The treatment groups did not differ significantly in the proportions of families who received financial assistance from pension, social security, aid for dependent children, unemployment, disability payments, or other financial assistance. Over four-fifths of the families did not receive financial assistance from a source outside of the family.

Race and nationality. A high percentage of the treatment groups were Caucasian and native born. Less than one-tenth of the research sample were Negro and less than two percent identified themselves with a foreign nationality.

Characteristics of adults. Being cognizant of the characteristics of disadvantaged rural adults in the community was considered to be a requisite for the local coordinator who conducted the educational program. The adults in the treatment groups can be characterized as being (1) rather immobile, (2) employed in an agricultural or home economics occupation, (3) approximately 40 years of age, and (4) having less than a high school education.

The treatment groups appeared to represent the same population on all variables except number of years of education. The experimental group had completed significantly less years of education than the control group when compared by analysis of variance. The adults in the experimental group had completed an average of 7.1 years while the control group had completed 8.5 years.

Characteristics of children. Most of the children living at home in the disadvantaged families were born in the county in which they resided or an adjoining county and were non-employed students. Children of disadvantaged families who were away from home appeared to prefer to stay in the rural area in which they were born and had spent their childhood. The occupations of the children who were away from home were more diverse than those of their parents, however.

Parental wishes for children. Parental aspirations for their children who were over 12 years of age and living at home were ascertained by employing an interview schedule as a pretest measure. Parents in both treatment groups generally did not perceive that their children, sons or daughters, would earn more than $8000 when they became adults. Parents aspired for their sons to earn a higher salary than their daughters.

The parents desired the children to live in a rural area or small town in preference to the city. A substantially higher portion of the experimental group parents did not know or left the decision of where to live up to the sons. This may have been due to the treatment effect of the local coordinator gaining rapport through home visitations prior to the beginning of the educational program.

The amount of financial support that the family would realistically be able to support for each child's post-secondary education was generally not known by the parents in either treatment group. The parents did not know or thought the cost of one year of post-secondary education would cost less than $1000. Approximately one-half of the families felt they could provide some support for their children's post-secondary education. About three-fourths of the families who indicated they could provide some support, indicated that they could provide 50 percent or less of the cost. Nearly two-fifths of the families felt the child could pay one-fourth to one-half of his own post-secondary education. A significantly higher proportion of the control group than the experimental group, felt that money from outside sources would be available to support their children's post-secondary education.

Occupations and organizational affiliations of parents. The adults in the treatment groups were similar in composition for both the husband and wife with respect to major marketable skills possessed, occupational training desired, job satisfaction, other type of job desired, and new marketable skills desired.

Generally speaking, the husbands in the disadvantaged families possessed agricultural and industrial skills, did not desire occupational training, and were satisfied with their jobs. However, slightly less than one-half of the husbands desired a different job. The wives typically did not desire occupational training and were satisfied with their jobs. Approximately one-fourth of the wives desired occupational training which would enable them to obtain a different kind of a job.

Adults in the treatment groups were also similar with regard to their organizational affiliation. Nearly one-half of the adult family members belonged to at least one organization or group. Only a few held an office or were members of committees in an organization or group. The treatment groups were almost devoid of adult members who wished to join groups or organizations.

Situation and goals of children. The pretest data concerning occupational experience, financing post-secondary education, and desire orientation indicated that children in the treatment groups who were twelve years of age or older and living at home represented the same general population.

The dominate area of work experience was agriculture for the sons and home economics for the daughters. The sons desired part-time work as well as a career in agricultural or industrial occupations. The daughters wanted work experience and a career in a business or office occupations. Incomes the sons desired from a future occupation ranged from less than $4000 to over $10,000 per year with a nearly even distribution in the income classifications which were in $2000 increments. The daughters desired incomes from their future careers that ranged from less than $4000 to nearly $8000 per year. Many of the children did not know what level of salary they would like to earn as adults.

A high percentage of the sons in both treatment groups wanted to live in the rural area or in a small town. Equal proportions of the daughters desired to live in a rural area, small town, and city.

Over one-half of the sons and approximately one-third of the daughters were contributing some of their educational costs. Significantly more of the daughters in the control group than the experimental group were contributing some of the cost of their secondary education. Typically, the sons and daughters had little, if any, savings for post-secondary education and did not know what percentage of their post-secondary education would be provided by the family.

Sons, as a group, were oriented in their immediate desires toward occupations, material items, and education. Daughters' immediate desires were oriented toward material items, occupations and education. The next strongest desires of the sons were oriented toward occupations, education, material items, or family. The daughters' next to the strongest desires were oriented toward family, material items, and education. Orientation of desires for five years in the future was preponderately toward occupations for boys. Girls' future desires were oriented toward occupations, education, family or material items.

Farm business goals. The management of the farm business was established as an essential topic to be included in any program for disadvantaged rural adults. These data were collected to ascertain the nature of the production goals that the farm business operators had established for the various enterprises.

The goal classifications of the various enterprises were found to be independent of the treatment group classification indicating that the samples represented the same general population. The yield goals established by the farm business operators for pigs per litter appeared to the researchers to be in a range that would be profitable. The yield goal for bushels per acre of corn and soybeans appeared to be below profitable yields.

Educational Program Evaluation

The evaluation of the educational program was based on a pretest and posttest measure which employed a battery of interview schedules, standardized instruments and a school data form. The statistical procedures of chi square and analysis of covariance were utilized for analysis. The interview schedules included variables related to parental desires for their children, occupations and organizations of parents, situations and goals of children who were twelve years of age or older and living at home, situations and goals of the family, the farm business, and the home and its surroundings. Variables included on the standardized instruments were related to the community, morale, perceived social class, deprivation, and leisure time. The school data form was employed to obtain information for each child over twelve years of age in the families regarding attendance, overall grade point average and vocational grade point average.

Variables were grouped according to the instrument from which they were obtained and are discussed in turn.

Parental desires for their children. Parental desires for their children concerning education, occupation, income and area of residence were obtained by employing Interview Schedule I. This instrument was used as a posttest measure to obtain data to ascertain if parents desires for children in the experimental group after receiving the experimental treatment differed from the control group.

It was ascertained that the experimental group parents desired to leave their children's occupational choice up to the child whereas the control group tended to respond that they did not know what occupation they desired for their children. Significant differences in response patterns for the occupation the parents desired for their children were obtained only for the third from the oldest child.

A significant chi square value was obtained for the level of education that the parents in the treatment groups desired for their oldest child. A higher percentage of the experimental group had educational aspirations of specialized vocational and two-year college. Fewer of the experimental group parents than control group parents desired educational levels of high school or left the decision of level of education up to the child. Thus, it appears that the educational program, which encouraged parents to establish realistic educational goals for their children, had an effect on the educational aspirations of the parents for the children.

The educational program also included the establishment of realistic goals for the level of income parents desired for their children when they became adults. The level of income classification was found to be a function of the treatment group for the parents' desires for sons, but not for daughters. A higher percentage of the parents in the experimental group as compared to the control group wanted their sons to earn an income that was between $6001 and $10,000. The control group largely did not know or did not respond to what level of income they desired for their sons. Thus, in the opinion of the researchers, the experimental group parents had established realistic goals for their sons' annual income.

The response classification for the parental desires of the location they would like for their children to reside in when they became adults both in relation to the location of the parents' residence and the location of the residence with regard to rural or urban area were both found to be functions of the treatment group. A higher percentage of the experimental group parents left the decision of the locations of the residence up to the child as compared to the control group parents who tended to want their children to live in a rural area near them. Hence, the effect of the educational program appeared to be toward an increase in the willingness of the parents to allow their children to get away from home in order to acquire jobs which would provide an adequate living. This decreased the limitation that parents imposed on their children thus allowing economic mobility as well as geographic mobility.

A significantly higher proportion of the experimental group parents compared to the control group parents were able to estimate the annual cost of post-secondary education for their children. A majority of the experimental group parents estimated the annual cost of post-secondary education to be between $500 and $2000. Considering that the nature of post-secondary education would affect these costs, it appeared that these estimates were realistic.

Departures from expected frequencies for the sources of financial assistance that parents thought were available for their children's post-secondary education were not observed for the variables of the financial support expected from the family, child's work, loans, or other sources. A significantly higher percentage of the parents in the experimental group as compared to the control group estimated that up to 25 percent of the post-secondary educational expenses would be defrayed by scholarships. A majority of both treatment groups estimated that none of their children's post-secondary education could be financed by scholarships. Considering the level of the average grades reported later in this research project, the parents' estimate that no support for post-secondary education would be available was accurate for the majority of the children.

Occupations and organizations of parents. Statistically different patterns of responses were observed for the type of occupation in which the wife was employed, new job skills acquired by the husbands, other kinds of jobs desired by the husbands, wives' participation in civic, fraternal and political organizations, and husbands' participation in job related organizations, but not for the type of occupation in which the husband was employed, new job skills acquired by the wives, other kinds of jobs desired by the wives. husbands' participation in civic, fraternal or political organizations, and wives' participation in job related organizations. These data were obtained by employing Interview Schedule II.

The proportion of the wives who reported being employed in home economics and unemployed deviated considerably; more wives in the experimental group reported that they were unemployed. Since the researchers did not consider the possibility of the wives being unemployed as being conceivable, it was assumed that experimental group wives reported that they were unemployed because of the emphasis placed on wage earning occupations in the educational program.

More husbands in the experimental group than in the control group reported learning new agricultural and business skills, while a higher percentage of the control group reported learning no new skills.

A disproportionate number of the husbands in the experimental group wanted to obtain a different job than the one they held at the time of the posttest. This indicated to the researchers that they were more dissatisfied with their situation.

A significant trend toward participating in groups and organizations was observed for both the husbands and wives in the experimental group as compared to the control group. More wives in the experimental group than in the control group participated in civic, fraternal or political organizations. A higher percentage of the husbands in the experimental group as compared to the control group participated in job related organizations. Although this participation was reported as being rare, occasional, or sometimes regular, it was considered to be a move back into the activities of community life.

Situations and goals of children age twelve and over living at home. The focus of Project REDY was on the children, especially the children who were twelve years of age or older and were living at home. Thus the researchers hypothesized that observable changes would exist between the experimental and control group at the time of the posttest.

Significant departures from the expected equal proportions of responses in the response classifications for the frequencies of children who were twelve years of age and older and living at home were observed for the variables of (1) various fields of employment, (2) estimated cost of one year of post-secondary education, (3) location of home desired for lifetime work, (4) scholarships as a source of financial support for post-secondary education, and (5) knowledge of the sources of finances for post-secondary education and level of income desired. Significant deviations from expected frequencies were not observed for the variables of (1) sex of the children, (2) educational situation, (3) employment situation, (4) orientation of desires, (5) participation in school and community functions, (6) parents as a source of financial support for post-secondary education, (7) self-employment as a source of financial support for post-secondary education, and (8) loans as a source of financial support for post-secondary education.

A disproportionate percentage of the experimental group children as compared to the control group children were employed in occupational fields of agriculture, business, industry and home economics. A higher proportion of the experimental group children were employed in agriculture and industry as compared to the control group, of which a higher percentage of the children were employed in business and home economics occupational fields.

More children in the experimental group indicated desires for a career in agriculture while a higher percentage of the control group children were undecided regarding the type of career they desired.

Children in the experimental group were able to estimate the cost of one year of post-secondary education with a higher degree of accuracy than the children in the control group. A majority of the control group were not able to give any estimate of the cost of one year of post-secondary education.

Compared to the control group, significantly higher proportions of the children in the educational program desired the rural area or small town for the location of their lifetime work. Thus, the effect of the program was to minimize the migration to the suburban and metropolitan areas.

Although not significant, a trend was observed for the children in the experimental group to have their strongest desire oriented toward education. This trend was reflected by the significantly greater percentage of the experimental group who felt that some financial assistance would be available from scholarships, and the significantly higher percentage of the experimental group who indicated that they knew the sources of finances for their post-secondary education. Significantly more of the children who were involved in the educational program than the control group knew what level of income they wished to earn when they became adults. In general, the experimental group tended to desire higher incomes than the control groups. It was noted, however, that approximately equal proportions of the experimental and control group children desired incomes of $10,000 or more which may reflect that some children in both treatment groups had unrealistic goals.

Family situation and goals. Although the educational program was focused on disadvantaged rural youth, changes in the adult family members were also sought in order to change the environment of the youth and bring the family back into the mainstream of community life. Adults were encouraged to change their behavior in order to enable them to help their children. This seemed to be an effective method of motivation.

Significant positive changes in the behavior of the adults in the experimental group as compared to the control group were observed for the variables of (1) having more family members obtain a job, (2) expanding the production of home-raised products to adjust family expenditures, (3) developing a shopping list and shopping around for good buys to adjust family expenditures, (4) keeping records of expenditures to adjust family expenditures, (5) eliminating certain items of expense to adjust family expenditures, (6) budgeting amounts spent for certain items to adjust family expenditures, (7) doing without some items to adjust family expenditures, (8) receiving services from the local school, (9) receiving services from the Office of Economic Opportunity, and (10) receiving services from the employment service. Trends that indicated that some positive response was being made as a result of the educational program were observed for the variables of (1) getting additional occupational training and receiving a promotion to increase family income, (2) changing jobs to increase family income, (3) having one or more family members get a second job to increase family income, (4) getting more money from pensions or welfare sources to increase family income, (5) using borrowed money or credit for living expenses (6) using borrowed money for educational expenses, (7) utilizing the services of the University Extension Services, (8) utilizing the service of the soil conservation service, and (9) utilizing the service of the county health service. The trend for the variables of improving farming activities and using borrowed money or credit for business purposes favored the control group.

The additional emphasis given in this phase to the changing of the adult family members' behavior in order to mitigate the situation of the disadvantaged rural youth yielded impressive results. In the opinion of the researchers, these changes will be more long lasting than if the children alone had been treated with an educational program.

Farm business goals. The experimental treatment appeared to have very little effect on the production goals of the farm business operators for the enterprises of corn, soybeans, swine, calves, or lambs. Approximately one-half of the families had some type of farm business.

The researchers theorized that the duration of the educational program was not long enough to allow the farm business operators to complete one production cycle and start another, thus they may have tried out better production methods, but had not had time to observe results from the improved methods.

The home environment. An important part of the total environment of the child is the condition of the home and its surroundings. It was the opinion of the researchers that the condition of the home is largely a reflection of the attitudes of the parents toward life in general. Thus, changes made in the physical environment were interpreted as indicating that a change in the parents' attitudes had prompted them to improve the appearance of the home and its surroundings.

Significant positive changes were made by the experimental group as compared to the control group regarding the variables relating to the home and its surroundings of (1) repairing and remodeling the house, (2) obtaining better furniture, and (3) improving the condition of the yard and surroundings. Positive trends favoring the experimental group families were observed for the variable of (1) renting or buying a better or larger house, (2) obtaining a better water supply, (3) obtaining electricity for the home, and (4) obtaining a telephone for the home.

Morale. Raising the level of morale, the status of emotional well-being that delimits the effectiveness with which one works and reflects one's outlook on life, was considered to be a key factor in bringing socially disadvantaged families back into active societal life. Changes in the level of morale in a positive direction should increase the individuals' energetic participation and enhance his effectiveness to accomplish the task before him. Hence, a concerted effort was made as part of the experimental treatment, to change the family members' attitudes toward their own feelings of inferiority and pessimistic attitudes toward the community and environment.

The results of the treatment were reflected in a significant difference in the level of morale and general adjustment between the experimental and control group adjusted treatment means for both the total morale and the general adjustment variables. The experimental group when compared to the control group, exhibited higher morale and better general adjustment. Thus, it was concluded that the educational program had a positive effect on the family members' feelings of hopelessness and attitudes toward life and society.

Leisure time activities. The dearth of leisure time activities in which the socioeconomically disadvantaged rural family members participated and the low level of enjoyment derived from leisure time activities was identified in an earlier phase of the study. This social deprivation may have resulted frpm the low level of morale and feelings of inferiority exhibited by the families in the treatment groups.

After being involved in a vocationally oriented educational program, the families exhibited a significantly higher level of participation in leisure time activities and significantly more enjoyment from this participation. However, this result was confounded with the replications of the study as indicated by a significant interaction effect.

Community social behavior. In order to ascertain the effect of the educational program on community social behavior, pretest and posttest measures on nine scales of community solidarity were obtained. These scales were: (1) community spirit, (2) interpersonal relations, (3) family responsibility toward the community, (4) schools, (5) churches, (6) economic behavior, (7) local government,

(8) tension areas, and (9) a total score. Treatment effects were significant for the scales representing the families' attitudes toward schools and local government. The experimental group exhibited a significantly better attitude toward schools while the control group had a significantly better attitude toward local government. The main effects of treatment and replications were non-additive for both the schools and government scales. Thus, the treatment effect and the replication effect were confounded.

Perceived social class. It was ascertained in an earlier phase of the research that adults in severely disadvantaged rural families perceive themselves as belonging to the lower socioeconomic classes, namely: (1) upperworking, (2) working, and (3) lower working. The social class to which an individual associates himself appears to be related to his level of income. Increasing the income of the families would probably increase the socioeconomic class level to which the individual perceives he belongs.

The one year vocationally oriented educational program in which the experimental group families were involved in this study had very little effect on their perceived social class.

Deprivation. The researchers had mixed thoughts regarding the desirability of decreasing the level of feelings of deprivation. It was theorized that if the disadvantaged families did not feel deprived they would do nothing to alleviate their situation that had been identified as being severely disadvantaged in relation to the norm of the community.

Results of the analysis of the scales of deprivation appeared to indicate a trend for the severely disadvantaged families to feel more deprived as a result of the vocationally oriented education program. Since the families in the experimental group did make significant changes in their environmental situation, the theory that changing the environmental situation is dependent upon increasing the feeling of deprivation appeared to have some basis.

School data. The possibility that children who were involved in the vocationally oriented educational program would improve their grades and attendance in school was anticipated by the researchers. However, these changes were not observable during the short duration of the experimental treatment.

Conclusions

Conclusions that could be drawn from a study of this scope are limitless. Thus, only those conclusions that were considered to be of special significance are reported here. These conclusions are:

1. An effective family centered vocational oriented education program can be conducted by a local school teacher that will

produce significant changes in the attitudes and situations of severely disadvantaged rural family members.

2. Severely disadvantaged rural families who have become isolated from society can be involved in an educational program conducted by local school personnel.

3. Teachers can and will conduct educational programs for rural disadvantaged families if adequate materials, instructions in conducting a program, and adequate support of their morale are provided.

4. Motivation of rural disadvantaged adults to mitigate their situation can be obtained by focusing attention on the future of the children.

5. Involving severely disadvantaged families in a vocationally oriented educational program significantly improves the morale of family members.

6. Improving disadvantaged family members' outlook on life, their morale, results in the improvements in the physical environmental condition of the home and its surroundings.

7. The aspirations of parents in severely disadvantaged rural families can be effected by involving them in a vocationally oriented educational program.

8. Significant progress toward bringing disadvantaged families back into the mainstream of society can be made during a one year educational program.

9. Both parents and children can be caused to recognize that education and vocational training are means of alleviating their disadvantaged situation.

10. Involving the entire family in a vocationally oriented program designed to develop the capabilities of youth is an effective way of obtaining desired changes in the attitudes and aspirations of children and gaining family support for children's desires.

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